



AKADEMIA  
HIGH SCHOOL

# MAGAZINE

2024 | 2025



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# Message from the Headmaster

Dear AHS Community,

2024/25 has marked a significant chapter in the development of our school with three highly prestigious accreditations and international recognition of the highest level of education that Akademeia High School offers. The ISI inspection in the Autumn led to Akademeia gaining the British School Overseas Status and COBIS accreditation as well as membership in the highly elite HMC association. Tellingly, all the inspectors commented on the unique character of our school.

In this academic session, we have also seen an unprecedented and astounding level of achievement in international and domestic competitions across all years. From international debating, through science innovation and entrepreneurship, to university essay competitions and Olympiads our students have demonstrated incredible grit and exceptional ability.

An array of community engagement projects locally and abroad also speaks to a great and ever stronger spirit of kindness and leadership that permeates our school community. There are also so many smaller yet equally important moments of growth and achievement through classes and co-curricular activities. These moments must also be celebrated as they constitute and stimulate the growth that we so cherish in our school and this is why publications such as this are so very important.

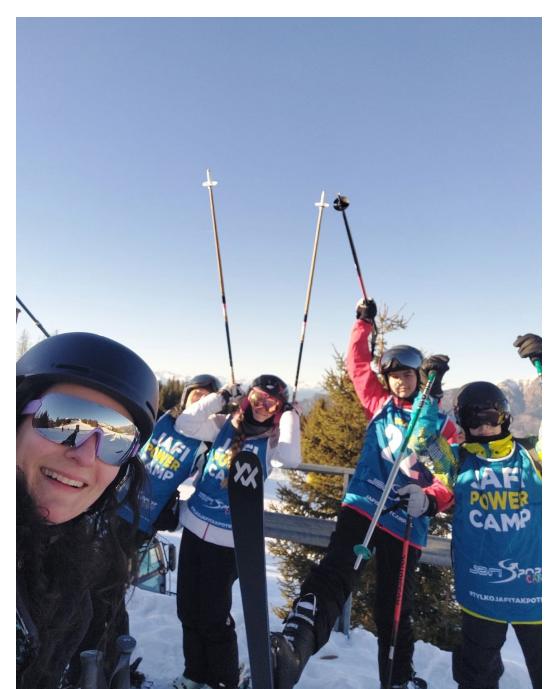
I wish to thank Ms Blank and all involved for capturing the spirit of our school so well and producing another effervescent volume that reflects our students' creativity, curiosity and love of enquiry – all essential elements of the joy of learning. I very much hope that you can share this joy as you read across these pages.

With best wishes,



Dr Karolina Watras





# 5TH FORM SKI TRIP

# Letter from the Head of Fifth Form

It is my pleasure to write this reflection on another energetic and inspiring year. Over the course of this year, it has been wonderful to see our Fifth Form students grow in confidence, creativity, and agency. In Fifth Form this last year has been a year defined by student voice and leadership. This was demonstrated in our increasingly student-led assemblies to the vibrant fashion show and the unforgettable school productions such as the Little Shop of Horrors.

Our Fifth Formers intellectual curiosity has been equally impressive. Many excelled in Olympiads and challenges such as the National Scientific Thinking Challenge (UK), while others represented the school with distinction at Model United Nations conferences and our very own AKAMUN. This spirit of enquiry was also reflected in our STEM achievements. Fifth Formers played a leading role in the Science Fair, inspiring all students through innovative projects and experiments. Most notably, our First Lego League team, Lemomates, achieved tremendous success. First at the national competition in Poznań, and then representing Poland

at the Open Africa Championship in Cape Town, South Africa. Competing against over 80 teams worldwide, they received the Engineering Excellence Award for their robot design, innovative project, and exemplary teamwork. This remarkable achievement stands as a testament to their creativity, collaboration, and perseverance.

Our students also participated in a wide range of excursions. Our Fifth Form ski trip saw record numbers of snowboarders mastering the piste. The end-of-year residential spanning Italy, Switzerland and Greece were a great success. Closer to home, friendships were strengthened and teamwork fostered through a variety of integration trips and activities. This includes such highlights as bushcraft workshops, ice skating, theatre visits and escape rooms.

This has been a year of remarkable milestones which have highlighted the excellence and integrity of our community. The school's successful BSO and HMC accreditations over the last year act as testament to great success of our student body and faculty. As Head of Fifth Form, I am deeply proud of all that our students have achieved and the school values that they have shown. I look forward to seeing how they continue to build on this incredible year in the next stages of their journeys at Akademeia.

Peter Davidson



# KAZIMIERZ DOLNY



# Letter from the Head of Year 9

This school year, Y9 students took part in many activities both in and outside of school.

The main goals were to build friendships, create a strong community, and help students feel connected—bonds that will last throughout their time at school.

Two of the biggest events were school trips—one at the start of the year and one at the end. In September, students spent time together in Kazimierz Dolny, a beautiful town by the Vistula River. They took part in interesting workshops about the town's history and culture, as well as many fun sports activities.

In June, during the last three days of school, they went on another trip—this time to the Świętokrzyskie Mountains. It was a great way to wrap up the school year, full of outdoor activities, teamwork, and shared memories. It truly was a special time that will stay with us for a long time.

Throughout the year, Y9 students also joined various activities around Warsaw. One unforgettable experience was visiting an escape room themed around the Warsaw Uprising. The students were very engaged and excited while solving the puzzles.

One of the special things about being in Y9 is that everything is new.

For many, this was the first time taking part in the school musical—congratulations to Amber and Matylda for their great debut performances!

It was also the first time playing in school sports

teams—well done to Janek Bagiński for proudly representing Y9 in volleyball tournaments.

Students also completed their first big PDS projects, took part in Art Week and Natural Science Day, and were very active in all of these events. For the first time, Y9 students also regularly took part in school assemblies—not only presenting but even leading the whole event.

Throughout the year, our work was based on the core values of our school. Among them, passion for learning, respect, and kindness were especially important for us.

That's why we also made sure to find time to do something good for others—to share what we have with those in need.

In May, after the eighth-grade exams, Year 9 students took part in two volunteer workshops, where they made things by hand for sick children. One was the Monkeys Challenge, led by Ms Edyta Czerwonka, where students sewed cuddly monkey toys. The other was a workshop run by Year 11 students, where they made colorful and heartfelt cards for Children's Day, to be delivered to children in hospitals.

Another highlight was the Career and Guidance Program, which helped students begin thinking about their future.

This was the first time we introduced this program to our youngest students. During Mentor's Hour, they met inspiring Sixth Form teachers—Mr Głowacki, Dr Borzym, Dr Mikoszewski, Ms Ladzińska, and Dr Kowalski—who encouraged them to discover their passions and think about how these interests might guide their future careers.

The excellent results Y9 students achieved in the recent exam session show that academic growth goes hand in hand with personal development at our school.

We are proud to see how well our youngest students are growing in every way and starting their school journey with such a strong foundation.

**Patrycja Krysińska**



# MAZURY



# Letter from the Head of Year 10

Year 10 is by default a year of firsts. First year of high school and, for many students in the current cohort, first year in a new educational system and in a new language. But the 2024/2025 academic year has been even more unusual: we have for the first time introduced the RSHE curriculum and have been meeting twice per week for mentor's hours. I hope that more frequent meetings have helped build trust, create friendships, and ensure more support from mentors. But structural changes aside, Year 10 has also seen a number of outstanding successes, both academic and extracurricular. Our Lemomates team - composed entirely of Year 10 students - won the national Lego League competition and jetted to South Africa to bring home the prestigious Engineering Excellence Award from the First Lego League Open Africa Championship in Cape Town in May. With more than 80 teams from across the globe competing in this event, this achievement is a huge first for our students and a testament to their hard work, creativity, and collaboration. Closer to home, Year 10 volunteers gained their first international event experience at the IMPACT Conference in Poznan, contributing to the logistics and enjoying the privilege of listening to Barack Obama, among other speakers.

On an individual level, Jan Szczepanski made school history by becoming the first Year 10 student to achieve a Distinction Award in Cayley, Hamilton, and Maclaurin Maths Olympiad. I cannot wait to see what next academic year will bring for Jan and other Year 10 laureates in different disciplines!

And yet, awards and achievements – however important – are only part of the story. Like mountain climbers reaching for the summit, our future Year 11s should not forget to enjoy the journey and keep discovering something new every day of their school life.

**Dr Vladyslava Reznyk**





# Letter from the Head of Year 11

As Head of Year 11 at Akademeia, I am incredibly proud to reflect on the journey this cohort has taken over the past academic year. We began the year with a successful integration camp, where we welcomed a few new students into the group. From the very beginning, the students showed enthusiasm, openness, and a strong sense of community. Throughout the year, I have watched this group mature both academically and personally. They have achieved excellent results in their studies and shown a growing sense of purpose as they begin to explore their future paths. Many of them have developed a clearer vision of what they want to pursue beyond school, which has been both inspiring and encouraging to witness. A highlight of the year was our integration trip to Sejny. Not only did it further strengthen bonds within the group, but it also gave students valuable insight into the historical and cultural complexities of borderland regions. Another memorable event was the friendly competition at TEP factor - while only a few students attended, it proved to be a fun and meaningful bonding experience. Year 11 students also played an active role in our school community, particularly during Open Days, where their engagement and school spirit truly stood out. In addition,

their participation in academic competitions and olympiads brought fantastic results and demonstrated the cohort's dedication and talent. This group has grown close to my heart, and it has been a true pleasure to support and guide them. I will miss working with them next year but am confident they will continue to thrive.

**Ron Fränzel**



# 6TH FORM SKI TRIP



# Letter from the Head of Sixth Form

This year in the Sixth Form has been a brilliant reminder of just how much a committed, curious, and occasionally sleep-deprived community of students, mentors, and teachers can pull off together. Yes, there were offers from top universities—but just as impressive was watching students fall head-over-heels for subjects off the beaten track, like anthropology or archeology. These weren't always obvious choices, but often came to life through a casual chat with a mentor, a seminar rabbit hole, or an ambitious coursework project that led somewhere unexpected. We've also seen students use their academic voices to stand up for what matters—from exploring decolonisation in their essays to delivering powerful presentations on Palestine. These weren't tick-box efforts; they were thoughtful, brave, and often genuinely moving.

Of course, it wasn't all plain sailing. There were tough grades, dashed dreams, and a few wobblers along the way. But what's been remarkable is how many students faced those moments head-on—making changes, asking for help, picking themselves up, and coming back stronger.

Perhaps what's stayed with me most, though, is the quiet solidarity. The shared revision notes, the late-night pep talks at the boarding house, the spontaneous group study marathons. I overheard one student say in the corridor, "*I'm not interested in competing with anyone. I hope we all make it.*" Honestly, that just says it all.

Aleksandra Ladzińska



# GDAŃSK



# Letter from the Head of Year 12

Dear Y12 Y13 Students,

Time flies! It feels like just a month ago we were meeting for the first time in the corridors or during our first lessons, and now you are starting your final year of high school. On the other hand, it's hard to believe how many memories we've created together: the integration trip to Gdańsk, assemblies, lessons in our favourite subjects, apple picking, the first exam session, school elections, a baking competition, mentoring hours, university workshops, meetings with Dr. Watras, clubs, outings, lectures, sports events, amazing trips, PDS projects, kayaking, A-Level exams, and much, much more - all of this happened in just one year!

Now you know that Year 12 is a new chapter that requires more maturity and self-discipline, and it comes with many challenges. You had to integrate with new classmates and navigate a more demanding curriculum, face serious exams, make university choices, and start the application process. That was a lot to handle! And guess what? Year 13 will not be easier - at least not at the beginning, until the application process is complete. After that, you will need to focus on "just" achieving the grades you need. But hey,

if you are reading this, you are likely one of the 100 students who made it to Year 13 - congratulations! Now is the time to reflect on what you did well, and what areas you need to improve for the upcoming school year. I wish for nothing more than to see all 100 of you as happy graduates at the prom around that time next year! Have a great holiday!

Paweł Chróstowski





# Letter from the Head of Year 13

The Year 13 cohort has had an unforgettable final year — one filled with hard work, laughter, and lasting memories. Between the whirlwind of university applications and preparing for life beyond school, they still found time for fun and camaraderie. Their year culminated in a truly fabulous graduation ceremony, celebrating all they have achieved and the incredible journey ahead. They will be greatly missed by staff and students alike, and we wish them every success and happiness in their adventures beyond school.

Aleksandra Wittchen



MAJA SADOWSKA (Y12)



# PERSONAL DEVELOPMENT SCHEME

Collaboration with the Alzheimer's Center, a project focused on homelessness, or involvement in the fight against climate change – these are just a few of the topics our students tackled as part of their PDS projects.

This year's edition showed us the directions we can take as a community: engaging with external issues, stepping beyond typical school activities, leaving behind what feels safe, and stepping out of our comfort zones. This is exactly what project-based work is all about: discovering within ourselves entirely new levels of patience, diligence, and inspiration. This year, our students demonstrated this in an extraordinary way – caring not only for the school community, but also for others.

Organising workshops for younger students from primary schools, inviting activists from Warsaw to speak at our school, visiting museums and exhibitions – these are just a few examples of what we've been able to achieve together. I sincerely hope this year will serve as an inspiration for future endeavors, for developing passions, learning to collaborate, and making the most of our freedom in upcoming projects.

Natalia Kowalczyk – PDS 5th Form Coordinator



PDS FAIR

# CO-CURRICULARS

Each year, we feel as though we've broken some kind of record in terms of the number of extracurricular activities our students are engaged in. And yet, every new year surprises us even more. This proactive attitude seems to be contagious - passed on from teachers to students, from the 6th Form to the 5th - and each year, new initiatives emerge and multiply. Students participate in clubs, compete in contests, organise conferences, and lead their own projects.

Honestly, summarizing it all is a bit stressful - we always worry that we'll forget to mention something important. But we'll try anyway.

As always, we are most proud of the student-led projects, both individual and group efforts - whether carried out as part of a competition or within the school framework.

We want to sincerely thank the students who organized large-scale events such as AKAMUN and the WOŚP finals, as well as the Fashion Show. Special thanks also go to those who conducted art, science, and sports workshops for Ukrainian orphans and local primary school pupils. And Szlachetna Paczka. And Mooting Club. And all student - led clubs.

We're also grateful for new initiatives such as the History and Science Slam, the Art Exhibition, and the Art & Music Workshops at the Alzheimer Center and the Oblique strategies exhibition on the Long Night of Museums in Muzeum Jana Pawła II i Prymasa Wyszyńskiego - we hope this marks the beginning of a new school tradition.

Congratulations are also due to the Debating Team for their outstanding performance in the IPPF competition, to the Sam-

sung Solve for Tomorrow – Viral project team, the Mini enterprsie Trener Now, the Lemmonates for their remarkable success at the LEGO World Championships, and the team that advanced to the Explory semi-finals.

Both the CanSat and Wharton teams put in tremendous effort, and we appreciate it. Not to mention the many students who participated in various academic Olympiads and competitions. Our congratulations also go to the students who represented our institution at the recent Villars Symposium, demonstrating both academic excellence and strong school spirit.

We strongly believe that grassroots projects - initiated and led by students - are the most effective way for them to gain agency, develop new skills, and experience meaningful learning. That's why it's so important to provide space and support for students to turn their ideas into action. Sometimes that means supervision or feedback; other times, it simply means stepping back. Often, it's about being that adults they can reach out to when needed.

We'd also like to highlight the many valuable opportunities offered by the school - clubs, workshops, lectures, and internships - which often serve as a launchpad for student initiatives. We are deeply grateful to all teachers involved in organizing and supporting these activities.

This year, we also launched AI, Medical, and Bioengineering workshops for students interested in those fields - these were well-received, and we hope to continue them next year.

Additionally, around 30 students were selected for internship placements via the school's in-

ternship competition or individual applications. We're grateful to the companies and institutions that welcomed our students - and to the many parents whose involvement made those opportunities possible. With a great pride we would like to also announce a new collaboration with Viva Derm Clinic, led by our alumnus.

In conclusion, we believe a successful extracurricular program is both the cause and the result of fruitful collaboration between students, teachers, and parents. We look forward to continuing this positive trend in the upcoming academic year.

On a personal note, I want to thank all the students and teachers I've had the pleasure to work with. It's been a true joy, and I will miss you greatly. I especially appreciate working with Student Council, all students who took up on the leadership role and force me to organise the activities for Ossa kids, last minute competitions, slams and workshops. Also, thanks to Mrs Łukasik and Mrs Wittchen for taking over my duties. Dear Students, you are in good hands.

**Maria Głowacka**  
Director of Co-Curricular

**Maria Głowacka & Monika Łukasik**



# VILLARS SYMPOSIUM

Villars-sur-Ollon, Switzerland

16 June – 20 June 2025

For four days in June, our four outstanding Y12 students (Maria Sommerfeld-Mikulska, Tomasz Rymaszewski, David Giltinane, Luke Bakic-Pawlak) had a unique opportunity to attend the Villars Symposium in Switzerland, which "brings together the Institute's partners and leading experts with the Villars Fellows to begin their life-long development as systems leaders."

In order to participate in such an event, students had to go through a rigorous application process, which involved essay writing. A total of 13 submissions were received from students across various year groups.

Before attending the conference, the students took two online modules dedicated to the Systems Thinking Essentials and Navigating Complex Problems.

The symposium was opened by Villars Institute Distinguished Lecture given by Prof. Johan Rockstrom to unveil the latest scientific evidence for planetary boundaries and tipping points, and explore how Earth system science can guide urgent action for climate stability and planetary resilience.

Each day the students attended the plenary sessions, among others they discovered the incredible stories of leadership and discovery from pioneering explorers, were able to celebrate the Frontiers Planet Prize Award reception, and to join the discussion to explore how innovation can accelerate the systemic change needed for a healthy and just planet.

The plenary lectures were enhanced by mul-

iple simultaneous sessions, allowing students to choose which ones to attend based on their interests.

We had an opportunity to experience truly something unique: a screening of the 2024 winners of the Festival International du Film Alpin des Diablerets. Two films were selected for us, such as "The Ice Builders" and "Haulout", highlighting the impact of climate change. "The Ice Builders" focused on the resilience and survival skills of the local population in a remote desert valley of Tibet, while "Haulout" portrayed the challenges faced by walruses on a remote Arctic coast in Siberia.

The symposium ended with a unique experience to enjoy the natural beauty of the region - the guided nature walk to Lac des Chavonnes, an alpine lake in Bretaye (1,808 meters).

Tomasz Rymaszewski:

"For me, the most valuable aspect -of the conference was learning to network with people I initially knew nothing about. I connected with people from different corners of the world: Nigeria, Macedonia, Canada, Philippines, Colombia, and Switzerland. I also had the opportunity to hear from and connect with many world-renowned scientists and leaders in a variety of fields. The planetary award presented by Frontiers—a journal I have used and even tried submitting to—was particularly interesting as leading scientists from all over the world, including Poland, presented their findings in

person. The workshop and lecture hosted by Dr Laura Penn was also extremely noteworthy and I plan to apply her insights in any future presentations of my own.

I believe that the true goal of this conference may be to bring what can be considered as the elite of the future together and instil them with the idea of sustainability and the know-how and motivation on how to drive meaningful change. The prestige of the event will help it stay memorable for many of us—and that, in turn, may lead to a lasting impact."



# SAMSUNG SOLVE FOR TOMORROW

Our Y12 students from the **Vital Team** have participated this year in a prestigious competition Samsung Solve for Tomorrow which is a program that encourages young people to use STEM (Science, Technology, Engineering, and Mathematics) to solve real-world problems in their communities. The Polish edition included three stages which our team has successfully passed. During the implementation of the projects, the students were able to count on the substantive support of experts specialising in various fields of knowledge, Design Thinking trainers, as well as Samsung volunteers.

Our students took part in the health category and developed the Vital band which measures patients' temperature, oxygen saturation, blood pressure, and ECG, showcasing its potential to support real-time monitoring and early detection of critical health events in emergency situations.

The Vital Team earned the "Positive Impact" award in the finals followed by their visit in Krajowe Centrum Monitorowania Ratownictwa Medycznego (National Centre for Emergency Medical Services Monitoring) where the students could present their project while the device was even described as "a revolutionary step in emergency medical services" by the centre's representatives. Their project was later featured in Business Insider and Samsung Newsroom Polska.



# E(X)PLORY

This year our three Year 12 students participated in E(x)plory competition which is the largest initiative in Poland supporting talented youth up to the age of 20 in carrying out innovative projects in the field of STEAM and promoting their achievements on the international stage. Our team has advanced to the finals of the prestigious E(x)plory 2025 competition in the Climate and Environment category with their innovative project, "Efficient Water Purification Using an Innovative Magnetic Material."

Their research, supervised by Dr. Magdalena Osial at the IPPT PAN nanomaterial lab, involved creating a 3D PLA printed bottle and a filter using biochar from banana peels enhanced with superparamagnetic iron oxide nanoparticles (SPIONs). The filter effectively removes antibiotics, pharmaceuticals, dyes, and other pollutants from water, aligning with UN Sustainable Development Goal 6: Clean Water and Sanitation.



# MATHEMATICS



GABRIELLE WOOLLEY (Y9)

# Letter from the Head of Department

This academic year has been one of exceptional achievement and growth within the Mathematics Department. From outstanding examination results to competition success, our students have consistently demonstrated critical thinking, creativity, and dedication.

A landmark moment came early in the year when Matylda Czernik achieved a perfect score of 200/200 in iGCSE Mathematics, the highest score in the world, marking a historic first for Akademeia. This extraordinary accomplishment set the tone for what has been an inspiring year.

Our co-curricular offerings, including clubs focused on GCSE Statistics, UKMT, and Olympiad preparation, have provided students with opportunities to explore mathematics beyond the standard curriculum. These initiatives have deepened students' understanding through problem-solving, data analysis, and advanced reasoning tasks.

This year marked our first mathematics trip to Maths Fest in London, a conference featuring a series of engaging talks, from group theory to probability, designed to inspire the next generation of mathematicians. And inspire it did. It was truly rewarding to see our passionate students deeply engaged in lively discussions sparked by the sessions. The trip will be especially memorable thanks to Aliaksandr Kuryla and Pola Kasprow, who won the Maths Slam, a competition where students present mathematical topics on stage. They delivered their presentation on division by zero, specifically the Wheel Theory, expertly in front of an audience of ap-

proximately 900 students and teachers, an outstanding achievement that filled us with pride.

In competition, Akademeia students excelled in the UK Mathematical Challenges, earning a remarkable 32 gold, 47 silver, and 58 bronze medals. Special mention goes to Danbee Ahn (Y12), who set a school record with a score of 23 out of 25 questions. In the British Mathematical Olympiads, five students achieved Merit awards: Zuza Malinowska (Y13), Adam Szkaradek (Y12), Kuba Wyszogrodzki (Y11), Mikołaj Nowak (Y11), and Harry Walker (Y10), with Danbee Ahn (Y12) and Jan Sczepanski (Y10) making history by becoming the first Akademeia students to earn Distinctions.

These achievements reflect the incredible efforts of our students and the unwavering support of our dedicated teaching staff. As a department, we continue to cultivate a culture where mathematical curiosity thrives and students are empowered to push boundaries. The enthusiasm and innovation evident in our students' projects this year are a testament to that shared commitment.

I look forward to building on this momentum in the coming year.

**Dr Peter Kowalski**

## *Students' Reflections*

### Jan Szczepański – Distinction in BMO

During my first year at Akademeia High School, I got invested in the world of competitive mathematics, taking part in three mathematical competitions, each following a different format and testing different knowledge and skills. Extracurricular Maths Challenge Club led by Dr. Poole provided great assistance in preparation for those contests. Having graduated from a Polish primary school, the journey was particularly interesting and challenging for me, as it was the first time I had to study and solve mathematical problems exclusively in English.

The first competition, the UKMT Intermediate Maths Challenge, was composed of 25 multiple choice questions, that required quick calculations racing against time. We practiced these quick problem-solving skills at Dr. Poole's math club extensively and it clearly paid off. In the end, I managed to score 117 out of 135 points in the UKMT competition, setting a new school record.

The Náboj competition stood out for its collaborative spirit. Working in groups of five, we had to cooperate and utilize quick mathematical reasoning to solve as many problems as possible in a given time. I enjoyed it a lot because it was a

good opportunity to test both our mathematical abilities and teamwork skills, and it is definitely something I am looking forward to taking part in again next year.

The Hamilton Olympiad was the one I found the most interesting and challenging. It was not as time limiting as the previous competitions, and instead of relying on quick calculations skills, it rewarded logical, often outside of the box thinking to solve 6 complex problems, that had to be supported with clear reasoning behind any solution in writing. I managed to earn a Distinction Award in this puzzle-solving competition, which happened to be the first time for a Year 10 student in Akademeia history.

Throughout the year I participated in the Maths Challenge Club run by Dr. Poole. It was a great opportunity to meet other math enthusiasts and develop mathematical skills in a friendly, inspiring atmosphere, at times spiced up by teamwork and healthy rivalry between groups.

The invaluable experience gained at the three mathematical competitions strengthened my appreciation of mathematics as an exciting area of study and personal development.

### Danbee Ahn – Distinction in BMO

I took part in the UKMT Senior Challenge and the British Mathematical Olympiad this year. I participated in these competitions to improve my mathematical skills by experiencing different types of problems. The BMO is different from the UKMT in the depth of thought that is required. There are 6 questions to be solved in 3.5 hours, unlike the UKMT where there are 25 questions to be solved in 1.5 hours. This year in the BMO, there were many combinatorics questions. In those questions, you are given a

mathematical situation, and by analysing and trying out different ideas, you can gain full insight into the situation, and thus, the solution. I enjoyed such processes while preparing, and found it was also helpful for other components of university applications such as university entrance tests. I recommend partaking in these maths competitions as the content covered in the BMO does not require advanced mathematical theory, just the ability to think.

## Mikołaj Nowak – Merit in BMO

This school year I wanted to develop my math skills further and did so quite effectively. I joined the statistics GCSE maths club to learn more about some of the real-life applications of mathematics and to have another GCSE qualification, which will always be useful. I liked the course because it made sure you would understand the topics and how to use them, not just remember formulas. I also took part in two in-

ternational math competitions: the UKMT Intermediate Maths Challenge and its follow-up round, the Maclaurin Olympiad. I achieved a gold medal in the IMC and then the Merit award at the Maclaurin. The Olympiad, in particular, really challenged and inspired me, showing how much more there is to Maths. I appreciate the opportunities I have to explore my favorite subject.

## Mateusz Krawczyński – Y11 Coding

I really enjoyed my experience in computer science this year. Since the end of last year, I have been interested in programming and engineering with Arduino, making a bunch of small projects and finding a lot of things online to help. This year in the computer science class, it has really brought this interest together. We learned about

some basics of programming in Python as well as how computers themselves function from the most basic building blocks of silicon transistors. The class has really brought my interest in engineering forward and made it my primary goal and focus.

## Adam Szkaradek – Y11 Maths Competitions

Our school offers a wide range of mathematical competitions, providing students with numerous opportunities to excel in various math contests and Olympiads. For students in Year 11 or lower, the Mathematics Department organizes the Intermediate Maths Challenge. Additionally, we have the opportunity to participate in Cayley, Hamilton, and Maclaurin Mathematical Olympiads, allowing us to compete against the best math students in the UK. For students in Years 12 and 13, there is the Senior Mathematical Challenge, followed by the prestigious British Mathematical Olympiad (BMO).

Apart from these individual competitions, our Mathematics Department also enrolls us in the international Náboj competition, for which I am very grateful and have participated in for years. This team competition involves solving tasks against the clock in groups of five, offering a unique and enjoyable experience that helps build stronger relationships with school friends.

At Akademeia, there is certainly no shortage of mathematical activities. The variety of competitions is so extensive that choosing which one to participate in might be a challenge. Fortunately, our Mathematics Department is always eager to assist in making these decisions.

# Surface Area of a Pringle

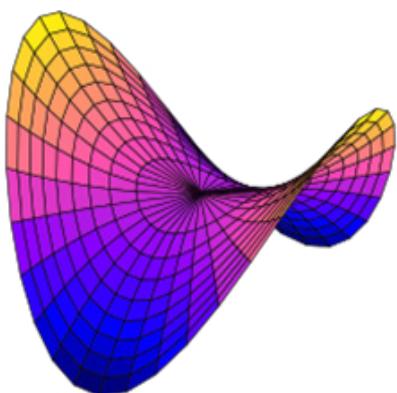
Yuyang Hu and Peiling Song – Y10

We wanted to calculate the surface area of a Pringle, as it has a very distinct and unique shape. Before we delve into the details, here's a rundown of the basic concepts of the Pringle's shape. A paraboloid, in layman's terms, is basically a 3D parabola. The shape of a Pringle falls into this category, as it is a hyperbolic paraboloid. It heavily resembles the Pringle, but how does one get this shape?

A hyperbolic paraboloid has a formula of:

$$z = \frac{x^2}{a^2} - \frac{y^2}{b^2} \quad \text{where } a \text{ and } b \text{ determine the curvature in the } x \text{ and } y \text{ directions.}$$

Now that the basis is set, these were the two methods we used:



1. Our first method was to use a real Pringle to calculate its rough surface area. We took several Pringles and wrapped them carefully in aluminum foil, like this:



Then, by tracing the edge of the Pringle and tearing it off, we could flatten the shape out and use the formula for the area of an oval which is:  $ab\pi$ . By obtaining the measurements from the shape made from the foil, we calculated that the total surface area was around  $65 \text{ cm}^2$ . Of course, we knew this was not the most accurate method to obtain these results, so we decided to try a second, more accurate method.

2. Our second method was to use calculus, getting the formula:

where the double integrals basically mean that it's the version of standard integral but suited for

$$\int \int \sqrt{1 + \left(\frac{\partial z}{\partial x}\right)^2 + \left(\frac{\partial z}{\partial y}\right)^2} dx dy$$

calculating with both x and y directions, while the 1 account for the wrinkles on the Pringle. Then we differentiate the formula, add limits, and input the numbers. Which ends up like this: where 32.75 to -32.75 and 32.25 to -32.25 are our

$$\int_{-32.75}^{32.75} \int_{-32.25}^{32.25} \sqrt{1 + \frac{4x^2}{65.5^4} + \frac{4y^2}{64.5^4}} dx dy$$

limits. Lastly, we used a calculator to get a very different result of  $42.25 \text{ cm}^2$

# Expected Value of the lottery

Harry Walker and Jakub Romanowski – Y10

## Defining the aim

In this project, our goal was to calculate the expected value (the average return per £1 spent) of the lottery, specifically the UK's National Lottery, as it had a more well-defined system than other candidates. For example, Blackjack has an expected value of around 99.5%, such that a player expects to lose only 5 pence for each £10 spent. In Roulette, it depends on the specific setup, but the house has a margin of around 3-4%. These more popular casino games were used as a benchmark to compare to the lottery and find which of the games is more statistically profitable.

## How likely are you to win the jackpot?

We used the binomial combination formula in order to find out that there were 45,057,474 different possible outcomes there are from buying a lottery ticket. Since the jackpot requires an exact match, there must only be one case, so the chance is around one in 45 million.

$$\frac{r!}{k! (r-k)!} \cdot \frac{(n-r)!}{((n-r)-(r-k))! \cdot (r-k)!}$$

## What is a rollover?

Having looked at the official statistics for the national lottery, we estimated that it was impossible for there to be a single round with over 45 million players, so there must be rounds where the jackpot isn't won. As the jackpot is a variable figure, we needed to find the probability of the rollover, where the unclaimed prize is added to the next round. The new prizes respective to a number of rollovers were able to be expressed as a fraction of the unclaimed prize over the number of winners for a category k, each with

a constant depending on the original prize. In order to find the probability of a rollover, we found the probability of no jackpot winner, and then subtracted it from one. The calculation required an estimate for the number of players, which was inferred from a large pool of data on the number of winners. Eventually, we found that the probability of a rollover was 82%, so a jackpot only happened 18% of the time.

$$P(w_k) = \binom{n}{k} p^w (1-p)^{n-w}$$

## Final calculations and conclusion

Lastly, using this new information, we could use the expected value formula for each value of k (the number of matches), and lastly add them all together to find the overall expected value, having multiplied by the average length of a series of rollovers. In the end, we found that for every £1 spent on a lottery ticket, the average return is just £0.40—making it significantly less favourable than other forms of gambling, and almost 60 times worse than Blackjack. It was a very challenging project, and a single-page report only does it so much justice, but at the same time we found it enjoyable, and it pushed us to discover more.

## Pola Kasprow (Y12) - Trip Summary

The adventure began early in the morning as our Year 12 students departed from Chopin Airport, landing in Luton, ready to embark on an exciting mathematical journey. Their first stop was the renowned Imperial College, where they had the unique opportunity to meet with a professor and explore the campus. After immersing themselves in the academic atmosphere, they wandered through London's vibrant streets, soaking in the city's iconic landmarks before boarding a boat to Greenwich. There, they visited the historic observatory and took in the breathtaking skyline.

The following day was dedicated to a full-day maths festival—an event filled with intellectual challenges, inspiring speakers, and engaging workshops. Students explored a range of fascinating topics, including the Rubik's Cube and its connection to group theory, the role of

mathematics in video games, exam strategies, hypothesis testing in statistics, the famous Birthday Paradox, and even the probability of winning in poker.

Towards the end of the festival, a selected group of students that advanced to the Maths Slam final, presented their mathematical concepts. Our students captivated the audience with their presentation "Division by 0", ultimately securing an impressive victory.

A huge congratulations to Pola Kasprow and Aliaksandr Kuryla for their outstanding achievement at the Maths Slam in London—we couldn't be prouder!

Though the trip eventually came to an end, it was an unforgettable experience for our Year 12 students, filled with learning, discovery, and lasting memories.

## Pola Kasprow (Y12) and Aliaksandr Kuryla (Y12)

We created "Division by 0: The Wheel Theory" — a presentation that explored the idea of extending standard arithmetic to assign outcomes for division by zero and to make further calculations with it possible. We presented both the theoretical background and real-world consequences of undefined operations, including a 1997 U.S. Navy missile system failure caused by a division-by-zero error, which paralyzed the entire cruiser for several hours.

Our presentation won first place at Maths Fest London. The biggest highlight for us was the presentation itself, as we were presenting to an audience of 900 people, a jury, and several others online. It was an invaluable experience, as we significantly improved our public speaking skills. Moreover, the trip as a whole was amazing, as we gained valuable knowledge in various areas of mathematics and had the opportunity to meet people who share our passion for this subject.



MATHS  
SLAM

# MODERN LANGUAGES



POLA WYLEGA (Y13)



## Letter from the Head of Department

With the rapid advance of AI and its efficient translation tools, the role of languages as an embodiment of human experience has grown even more important. Experiential learning which, according to research, is especially successful in creating emotional attachment to the studied language and increasing students' motivation, is at the heart of the Modern Languages Department at Akademeia. In the 2024/25 academic year, we taught and learned through games, projects, music, theatre, and international trips to Austria, Switzerland, Baltic countries, and Italy. From French rap to Russian fortune-telling, German Christmas cookies and Spanish flamenco, we have tried to embrace

and emphasise language learning as a journey into culture, diversity, and shared humanity. After their cooking workshops at locals' homes during a recent trip to Genoa in Italy, students talked with delight about learning from generations-old recipes how to make tiramisu and roll fresh pasta. Most memorably, they felt a tiny bit Italian when eating pranzo they just cooked. What you see in the photographs, slides, and essays below offers but a glimpse into this wonderful world. We do hope, however, to bring you more of multilingualism and cultural openness in the next academic year!

Dr Vladislava Reznyk



# Travelling Languages

## Reflection (English)

Last year, my friends and I took part in a roughly four-day-long trip in June to Vienna, which we still refer to today as one of the best trips we have ever participated in.

On the first day of our trip to Vienna, we went straight from the train station to our first journey, where we visited the Stephansdom, as well as the old town of Vienna. Although at first, our journey was a bit "adventurous" with the hotel reservation location, we still found an excellent alternative while we were talking a lot on the way to the new hotel as a part of our quasi-Integration. Besides that, the rest of the trip (luckily) ran very smoothly without any problems. On the next day, we visited the Hofburg in the morning and at noon, which has been transformed into the so-called Sisi Museum. During this trip, we could learn various informative stories about the life of the Empress, which in our opinion was well illustrated through the remaining props and apartments. Apart from that, we visited the Prater - one of the oldest amusement parks in the world in the afternoon, where we, consisting of year groups from Year 10 to Year 12, had an excellent opportunity to spend more time with each other.

The third day of our trip was much more focused on Austrian culture and art, because we visited the Schönbrunn Palace, as well as the Belvedere Museum with the Klimt exhibition, and lastly the Art History Museum. Nevertheless, we still definitely had time to eat Wienerschnitzel and try Sachertorte (which was surprisingly not as sweet as I imagined before).

On the last day of our planned attractions, we went to the Museum of Chocolate Hoder and participated in a workshop, at which we had the opportunity to make our own chocolates. Additionally, when we returned to our hotel, we watched the Eurogame between Poland and France on the TV, and although the play didn't significantly improve the situation of our team, each of us found the great way to spend the afternoon together. Then we took the train back to Warsaw on the next day.

I would say that I, as well as my friends, really found the trip enjoyable and sometimes even funny. In the meantime, it is also very informative and rich in culture, where we discovered much about Austria, but also about each of us.



## Reflection (Deutsch)

Letztes Jahr fand der ungefähr viertägige Ausflug im Juni nach Wien statt, an welchem ich und meine Freunde teilgenommen haben und welchen wir bis heute noch zwischen uns als einen der besten Ausflügen, an dem wir je teilgenommen haben, bezeichnen.

Am ersten Tag unserer Reise nach Wien sind wir gerade aus dem Bahnhof zu unserer Anführerreise, wo wir den Stephansdom besucht haben, sowie die Wiener Altstadt generell. Obwohl die ersten Momente unserer Reise ein bisschen „abenteuerlich“ mit unserer Hotelreservierungslage waren (danke Booking), haben wir trotzdem eine ausgezeichnete Alternative gefunden, während wir auf der Reise zum neuen Hotel miteinander viel gesprochen haben als ein Teil unserer Quasi-Integration; außerdem lief die restliche Reise (glücklicherweise) sehr glatt und problemlos.

Am nächsten Tag besuchten wir am Morgen, sowie am Mittag, die Hofburg, die heutzutage in das sogenannte Sisi Museum umgewandelt wurde. Während dieses Ausfluges konnten wir eine Vielfalt von informativen Geschichten über das Leben der Kaiserin, was durch die gebliebenen Requisiten und Appartemente unserer Meinung nach gut veranschaulicht wurde. Ansonsten besuchten wir dann am Nachmittag den Prater, wo wir, also unsere damalige Jahrguppen von Year 10 zu Year 12, eine erstaunlich gute Angelegenheit hatten, weiter Zeit miteinander zu verbringen.

Der dritte Tag unseres Ausfluges hat sich schon viel mehr mit der österreichischen Kultur und Kunst beschäftigt, denn wir haben das Schönbrunn Schloss besucht, sowie das Belvedere Museum mit der Klimtausstellung und letztens das Kunsthistorische Museum. Trotzdem hatten wir aber auch noch natürlich Zeit, den Wiener Schnitzel zu essen und die Sachertorte zu probieren (die überraschenderweise nicht so süß war, wie ich sie mir ehemalig vorgestellt habe).

Am letzten Tag unserer geplanten Attraktionen sind wir in das Schokoladenmuseum gegangen und Workshops bestanden, bei welchen wir die Gelegenheit hatten, unsere eigenen Pralinen zu machen. Zusätzlich, als wir wieder zu unserem Hotel zurückkehrten, haben wir das Eurospiel zwischen Polen und Frankreich im Fernsehen angeschaut und obwohl das Spiel wesentlich die Lage unserer Mannschaft nicht verbesserte, fand jeder von uns die Möglichkeit, toll den Nachmittag zusammen zu verbringen (auch wenn wir alle nur auf den Lauf des Spieles genervt waren), egal vom endlichen Ergebnis, um dann am nächsten Tag wieder nach Warschau mit dem Zug zu fahren.

Ich würde generell sagen, dass ich, sowie meine Freunde, den Ausflug wirklich spaßig und manchmal auch lustig fanden, aber in der Zwischenzeit auch sehr informativ und kulturell reich, wo wir vieles über Österreich, aber auch über uns gegenseitig entdeckt haben.



# NATURAL SCIENCES



AMELIA FRĄCZKIEWICZ (Y11)

## Letter from the Head of Department

# A year in a life of the Natural Sciences Department

For me, the grand opening of the 2024/2025 academic year was Patrycja Namysł's EPQ oral presentation. This the first ever AHS double-supervised EPQ – Ms Wittchen offered her expertise as Head of Music, and I added the necessary Biology. What emerged was Pati's unique look at the use of music therapy in patients with Alzheimer's disease. Little did I know that a few months later I'll be performing music with Pati, Maya and Ewa at the WOŚP concert. Akademeia indeed is about the connections and the interdisciplinary approach. In the meantime, our Y11, Y12 and Y13 students commenced their British Biology Olympiad preparations. Discussions, brainstorms, seminars and presentations – all revolved around some professional science journal articles. We went through the occurrence of endosymbiosis, innovative use of gene therapies and roles of miRNA in development of cancer. The most fascinating topic according to myself and multiple students was the importance of silent mutations. Silent as for many years researchers believed those wouldn't contribute to our characteristics. Paradigm shift occurred in genetics and suddenly silent became not only loud but meaningful and fascinating. With all the work put into the preparation, Olympiad results came back and once more our students delivered. One Bronze and one Silver Medal award went proudly to our year 11 students – Jakub and Olivier, respectively and our year 12 A level champions secured one more Silver (Leo) and two Bronzes (Maja and Julia) with also multiple Commendations and High Commendations achieved. In the meantime, AHS's Innovation Hub magazine team delivered even more great student led scientific content, proving that initiative and hard work can really

take you into places. How often can you read a professional science magazine run and edited by your students with articles delivered from the entire globe? That seminar and publishing extravaganza was followed by our annual Science Fair with a major student initiative shown. After some brilliant presentations our 5th form students visited and tested experimental stations run predominantly by their colleagues. Kefir production by lactic acid bacteria? You had a chance to even taste it! Hands-on experience with organ dissection run beautifully by a Y12 gang and Y11's Zuza? Great feedback from all the participants. Redox reactions, chromatography, physics-related phenomena, entire zoo in the pond droplet – it was all there, followed by mini-lecture and quiz. While the iGCSE and A level exams were running, we patiently waited for the results of Year 9 and Year 10 oriented Biology Challenge competition. Once more STEM passionate 5th formers showed quality with two Silver Medal awards going to Zofia and Harry, Wiktoria securing Bronze and two more students securing Commendation and High Commendation. As always – kaleidoscope of a year with multiple Biology events, achievements, farewells and new future STEM legends appearing on the horizon. I can't wait for more!

**Dr Jakub Mikoszewski**

# BIOLOGY

## *Biology reflections* by Year 12 Bio students

This year I decided not to ask a single student to write an account of their Biology reflections, I approached one of the Year 12 Bio groups instead. During long months of our lessons those people added to our experience so much more than just academic qualities – they offered togetherness and sense of humor, even on the rainiest and grimmest of days.

Find their quotes with my comments below:

“You will enjoy John Carpenter’s ‘The Thing’ after cell specialization topics. Highly recommend watching it prior to starting Bio A-level.”

True – once you study Y12 Biology, you’ll know how one of the most renown horrors in cinematic history is rooted in the idea of cell differentiation and the huge potential of stem cells.

“I appreciate Dr Baynes (we all do)”.

I can’t agree more. Bring gifts to room 15.

“Biology is full of shenanigans; acquiring a linkage family, hydrogen bonding with my classmates while waiting for Dr Mikoszewski running late, collecting mental cookies, realizing that starch is not real as well as free therapy sessions, and that was only term one!”

The real cake was eventually served as well!

“Biology is the best A-Level available, best subject, best teachers, best jokes, best brownies, best stories... everything is the best with bio”.

Probably true - take creative risks, choose Biology A level!

“The most heartbreakingly hilarious realisation, marking our transition from the 5th to 6th form was hearing one, particular sentence:

“STARCH DOES NOT EXIST.”

As such, my friends bought me an absolutely horrible book (we both despised it though), largely edited with their own comments with a font akin to hostage letters, including: “THIS BOOK SHOULD NOT EXIST, JUST LIKE STARCH”. Was it just one, small fraction of all the topics we covered? Indeed. But was it still one of the most significantly earth-shattering pieces of knowledge which permanently expanded our sense of humour? Possibly.”

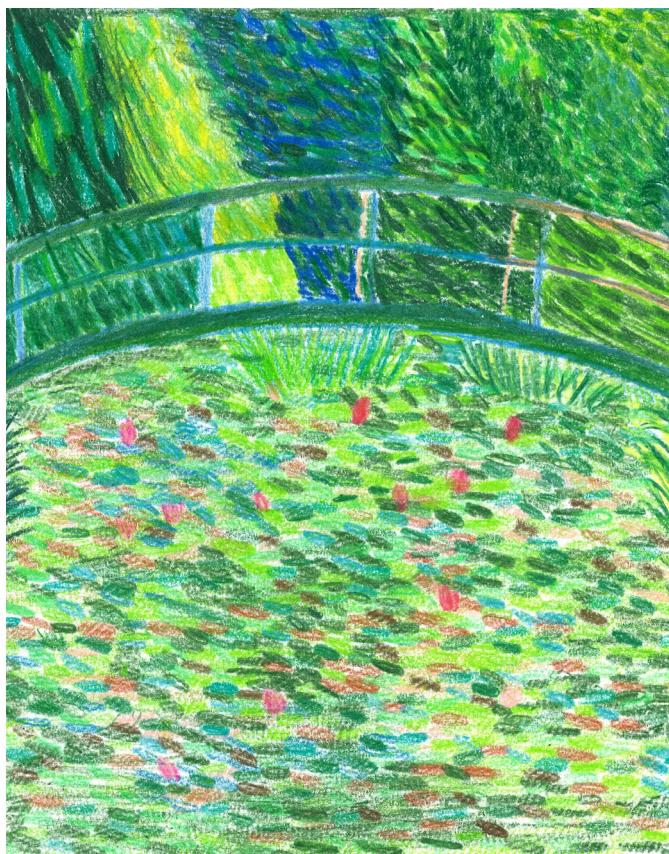
I regret to inform you all that indeed – starch doesn’t exist.

“After Biology, expect identifying the silica content and xylem thickness in grass by chewing it.”

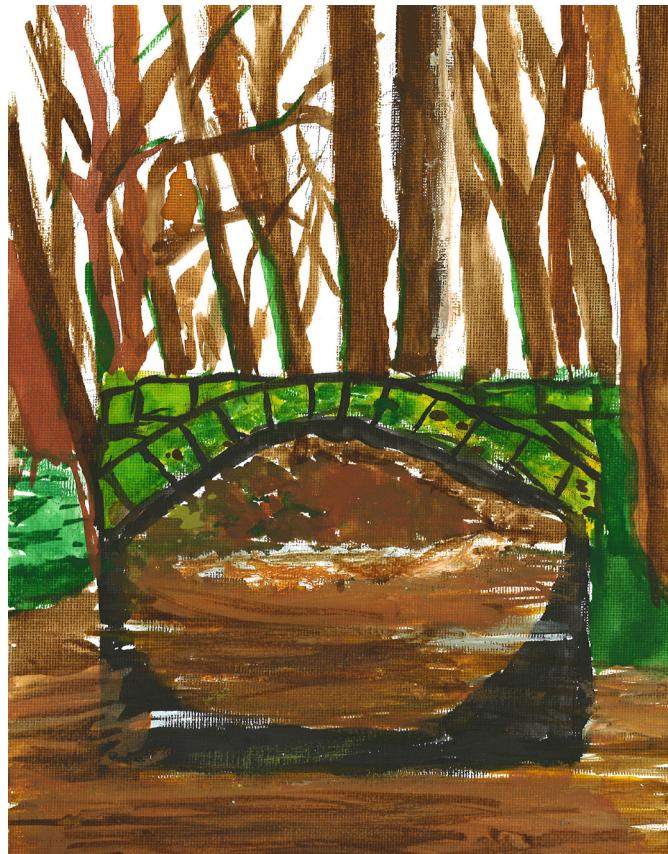
True – we offer hands on experience; you might have to sacrifice your dignity. A bit.

“Inspired by our newfound knowledge about blood types, my soulmate and I started a joint business venture. Dr Mikoszewski declined to join (disappointing). I am glad that the rest of the group decided to go skiing because that is how I managed to get closer to my favorite business partner <3”.

Don’t ask for the details. What’s true – a great friendship was born and bio witnessed it :)



JAN BAGIŃSKI (Y9)



LEONID KARPENKO (Y9)



AMBER UZNAŃSKA (Y9)



NICOLA CYCOŃ (Y9)

# PHYSICS

The Physics Department inaugurated the school year welcoming two new teachers to the team: Mr Michał Stobierski (BS and MS in Physics at Rensselaer Polytechnic Institute, New York) and Mr Shun Wong (MS Physics with Theoretical Physics, Imperial College London and PGCE in Science, Oxford). They contributed to enrich the expertise of the team in different fields of Physics but also made the department the most international of the school, uniting six physics members coming from five different countries (Belarus, Hongkong, Italy, Poland, United States) and three different continents (Europe, Asia, America). In a world afflicted by wars, violence and cultural breakdowns, our team's cultural diversity is a wind of fresh air, a key factor in pushing and developing new ideas for enhancing educational strategies of our new generation of scientists and engineers.

In September the school witnessed outstanding EPQ presentations engineering oriented from two Year 13 physics students. Alan Tomaszewski discussed with drive and passion the failures and successes of one of the most genial scientists in human history, Nikola Tesla, focussing the attention on his most important discoveries in the field of electromagnetism. Jan Gierszewski undertook a full immersion scientific investigation on the porpoising effect, an aerodynamic phenomenon where high performing racing car bounce up and down due to an extreme cycle of high and low down-force. The highlight of Jan's EPQ project was

constructing an **industry-level five-metre-long wind tunnel**.

Jan could have chosen to use the univer-



sity facilities for analysing the aerodynamic response of 3D-printed F1 model cars. Instead, he decided to delve into the extremely difficult but rewarding journey of building his own wind tunnel, willing to learn what it really takes to find engineering solutions to aerodynamic problems. This is the most outstanding piece of work ever witnessed in my career as a teacher, in fact reaching a researcher university level.

In November we observed the biggest cohort of A level students in the school history taking part in the Round One of the British Physics Olympiad, one of the most prestigious academic competitions worldwide in the subject. Our esteem and gratitude go to the magic eleven students (Piotr, Kamil, Bartosz, Alan, Danbee,

Jan G., Karol, Jan S., Jialin, Nadia and Aliaksandr) for engaging in this invaluable learning experience, achieving an outstanding result of 5 Silver medals (in the top 40% worldwide) (one of which awarded to a Y12 student) four Bronze I medals, one Bronze II medal and finally one Commendation.

In March our younger students took part in the Senior Physics Challenge (SPC - Year 12) and Intermediate Physics Challenge (IPC – Year 11), with special mention to the SPC silver medalists Tomasz, Aliaksandr, Karol, Danbee, Minh and IPC medallist Zoja.

The highlight of term 2 was the presentation of the **Arcade Machine project** carried out by three physics students, members of my mentoring group: Maciej Zagała, Bartosz Świdnicki, Franciszek Martynuska.

The idea of the project was born in the Autumn of 2024. Creativity, passion for program-



ming, a great interest in resurrecting an authentic milestone in the gaming technology: these are the most important ingredients that led them to realise one of the most wonderful projects I have ever witnessed. The project consisted in building the electric circuit connecting joysticks and buttons to a raspberry pie module fed by an emulator of good classic old games (Street fighter, Super Mario Bros, Pac Man, Tetris). Additionally, they build the whole framework of the Arcade Machine. This required a lengthy and hard wood-cutting work, with uncountable number of hours spent in the Art Room. The outcome was gloriously presented in the end of March 2025 in a full auditorium, receiving praises and admiration from the whole school community. Today the Arcade Machine is the jewel of the reception area of Akademeia High School, entertaining teachers, students and even visitors who love to jump for a few minutes in the fantastic world of gaming.

Last, but not least, in addition to their great contribution in teaching our physics students, a very special mention go to Mr Adam Markiewicz for amazingly organising the analytics of the department, to Ms Sviatlana Volchak for her invaluable contribution in running the 3D printer facilities and all technical and practical aspects of the department and to Mr Dariusz Aksamit for bringing the development of physics projects and ideas to a truly university level.

**Dr Giovanni Peralta**  
Senior Teacher in Physics

# CHEMISTRY

At our Chemistry Department, we place great emphasis on extracurricular activities. It has become a tradition for our Year 11 to Year 13 students to participate in the **UK Chemistry Olympiad**. This prestigious competition challenges students to apply their problem-solving skills to unfamiliar and complex scenarios.

We are especially proud of our Year 11 students, who consistently demonstrate curiosity and a strong commitment to learning, often going well beyond the iGCSE syllabus.

This year, a record-breaking 16'216 students from 1'502 schools took part in the Olympiad - an increase from 2024. At AHS, 25 students sat the exam, including 4 from Year 11.

The Olympiad questions were intentionally challenging, requiring students to think critically and apply their understanding of chemistry to topics such as carbon nanotubes, Raman spectroscopy, epoxides, and agarwood, among others.

We were absolutely delighted with the results: our students earned 7 Bronze awards, 7 Silver awards, and 1 prestigious Gold award.

Zosia, Y12 student:

"I still remember my reaction to my first opening of the UK Chemistry Olympiad paper and looked through the questions provided. Precisely, I remember my initial shock and amusement the moment I got into eye contact with the image of a Paddington plushie and furthermore spotted the phrase „BrAt Summer” next to it. Even though I did not manage to fully calculate

how long Paddington's „BrAt Summer” would last (according to the instruction provided), the longevity of the impression made me still not able to get his image out of my mind whenever I decide to listen to the aforementioned Charli xcx's album."

This year, for the first time, our students took part in the **National Scientific Challenge**, a competition specifically designed for Year 10 students. The challenge is organised by a team from several leading universities, including Warwick, Southampton, Bristol, Newcastle, Manchester, and Oxford.

What sets this competition apart is its focus on analytical thinking rather than memorised knowledge. Students are required to examine data, graphs, and texts to draw conclusions, identify patterns, propose hypotheses, and detect anomalies, and all without relying on previously taught material.

This year 15'663 students from 266 schools in 10 countries participated in the challenge, among which were the schools in the UK (England, Scotland, Wales and Northern Ireland were all represented), Singapore, Canada, Portugal, Germany, Abu Dhabi, Thailand, USA, Qatar, and Poland.

In AHS, 17 students from Y10 took part in this challenge, where 1 received bronze award, 4 silver awards, and 6 gold awards!



In our department we always try to provide the space for students to develop their experiences and skills running extracurricular projects. The **RED (Research-Explore-Develop) club** attracts students who would like to have an opportunity to expand their extracurricular chemistry related knowledge, learn new lab skills and experimental techniques. This year we were creating and analysing cross-linked alginate beads to be used for controlled release of substances depending on their structure and molecular mass.

We are especially proud that the students from different year groups could collaborate together, work on different parts of the same project.

This year, our innovative club **Chemical Influencers** was the space dedicated to prepare necessary materials, the Booklet and think on experimental stations for the Science Fair as well as to brainstorm on the workshops organised for the Primary school students. For the latter, our students prepared monthly topics, for instance, bath bombs, slime-making, and the elephant toothpaste experiment, for which they created PowerPoint presentations, videos, live demonstrations, and whole-class experiments. These young guests later were invited into our chemistry lab for interactive workshops, where they gained exposure to lab equipment and practicals. The sessions also introduced them to English scientific terminology, supported by spoken Polish to ensure a smooth transi-

tion into science communication in English. The workshops featured hands-on activities resulted in some creations which they could take home (bath bombs and slimes), and incorporated gamified elements such as quizzes, mini-whiteboard challenges, and coin quests to enhance engagement and learning.



This year, for the first time, we introduced **extracurricular hands-on projects** for all our Year 12 students, which they undertook individually or in groups after completing their external A Level exams. Based on their personal interests and academic subjects, students had the freedom to design and develop their **own projects**, supported by their teachers and our dedicated lab managers, Dr. Kałęcki and Mrs. Volchak.

We are incredibly proud of our students for embracing this opportunity with enthusiasm, with eagerness to explore, experiment, and learn through both successes and failures. Their willingness to engage in interdisciplinary work and remain open to new ideas has been truly inspiring.

**The projects were the following:**

- extraction of penicillin from the grown mould on oranges, bread and apples, where the obtained substance indeed inhibited the bacteria growth(!);
- creation of biodegradable coatings with incorporated essential oils with antimicrobial properties;
- solvent extraction of pigments from natural plants, beetroot, red cabbage, rape-seed, and basilic, which could be used as natural dyes both for cloths and painting explorations;
- separation of medically active compounds, paracetamol and aspirin, by gel-electrophoresis;
- extraction of iron salts from beans with the subsequent reduction to produce metallic iron. If to consider a negligible amount of iron (about 5mg of iron in 1 kg of beans), and the losses during the whole process, the students still managed to obtain tiny ferromagnetic iron particles, which were 'dancing' in the presence of the strong magnet;
- creation of 3D printed mold to make the teeth crown;
- designing of 3D printed polarimeter, a device which allows measuring the low amounts of optically active compounds in the aqueous solutions.

- modification of 3D-printed PLA structures by coating them with a conductive metallic thin film using various deposition techniques. These modified prints can subsequently serve as electrodes in electrochemical cells when immersed in different electrolytes.

We truly believe that this initiative provided students with valuable opportunities to deepen their knowledge, enhance their experimental skills, and genuinely enjoy the process of discovering and learning something new.

## Dr Nataliya Marchyk

Senior Teacher in Chemistry





# SCIENCE FAIR



Science Fair logo  
created by Laura Pietkiewicz (Y12)

# SCIENCE FAIR

# POLISH

When we think about Polish lessons, we don't limit ourselves to looking at literature alone. In every analysis, we always try to look deeper and broader. Sometimes, it takes just a blink, and suddenly literature becomes a prism through which we see philosophy, art, music, or the sciences. Successful literature lessons can take place anywhere: in the classroom, on a field trip, on a mountain trail, or in a literary café. That's why this year, our Year 11 students were given a unique assignment: to write an academic essay combining literature with other fields of knowledge and their own passions. We wanted our students to explore unconventional ways of interpreting cultural texts. The results exceeded our wildest expectations, and so we are delighted to share excerpts from their work with you, hoping they will inspire and move you just as much as they did us.

We hope you will find it an enjoyable read!

Polish Department

## Czy cywilizacja jest tylko cienką “zasłoną” przykrywającą ludzką naturę?

Karolina Malinowska

Pojęcie cywilizacji można rozumieć jako złożony system instytucji, norm, wartości, struktur społecznych, technologii i praktyk kulturowych, który kształtuje ludzkie życie zbiorowe. Z kolei ludzka natura to wieloznaczne pojęcie – obejmuje zarówno destrukcyjne impulsy, jak przemoc, żądzę władzy, egoizm czy agresję, jak i zdolność do empatii, współpracy, miłości oraz altruizmu. Metafora „cienkiej zasłony” sugeruje, że cywilizacja nie jest czymś głęboko zakorzenionym w człowieku, lecz raczej sztuczną, powierzchowną formą kontroli, która może łatwo ulec zniszczeniu w sytuacji kryzysu. Ta wizja pojawia się m.in. u Hobbesa, Freuda czy w dziełach kultury ukazujących momenty załamania ładu społecznego. Jednak taki pesymistyczny obraz to nie jedyny. Poglądy myślicieli takich jak John Locke czy Jean-Jacques Rousseau wskazują, że człowiek może być z natury istotą moralną, zdolną do współpracy i tworzenia struktur opartych na zaufaniu i racjonalności. W tej perspektywie cywilizacja nie jest narzuconą maską, lecz natu-

ralnym przedłużeniem ludzkich dążeń i ewolucji. Tymczasem doświadczenia współczesności, zarówno w historii, jak i w psychologii społecznej, pokazują, że cywilizacja i ludzka natura nie są wobec siebie jednoznacznie przeciwstawne, lecz pozostają w dynamicznym, kruchym napięciu. Takie podejście, inspirowane m.in. eksperymentem Zimbardo oraz obserwacją współczesnych procesów społecznych, pozwala dostrzec, że cywilizacja nie jest ani trwałym stanem, ani jedynie cienką zasłoną, lecz procesem, który wymaga stałej pielęgnacji, edukacji, instytucjonalnego wsparcia i czujności. W świetle wieloaspektowych ujęć filozoficznych, psychologicznych i kulturowych, najbardziej trafne wydaje się stanowisko, że cywilizacja nie jest ani sztuczną maską, ani naturalną kontynuacją naszej istoty, lecz delikatną równowagą, która powstaje w napięciu między instynktem a rozumem, ujawniając zarówno możliwości, jak i ograniczenia ludzkiej natury.

## Helena Jurczak

Co czyni cię człowiekiem? Czy tylko zlepek odpowiednich komórek sprawia, że ludzkość czuje się lepsza, wywyższa się nad innym gatunkami stąpającymi po ziemi? Od wieków pokolenia budują cywilizację. To dzięki ludziom, zyskała światłą i potężną reputację. Przechodziła przez najciemniejsze i najjaśniejsze czasy. Można jednak zaobserwować zmianę dyskursu ludzkiej cywilizacji. Dzieło przerosło człowieka – swojego mistrza. Gwałtowny rozwój ostatnich dziesięcioleci nieuchronnie prowadzi człowieka do zatracenia się w dziele jego własnych rąk.

Społeczeństwo nieustannie próbuje dogonić i uchronić cywilizację, gubiąc po drodze własną ludzką tożsamość. Ludzie, pozostawieni same sobie, są otoczeni masą, w której jednak nie potrafią znaleźć odpowiedzi na pytanie „Co czyni cię człowiekiem”. Prawdziwa natura człowieka bywa często skomplikowana i wielowymiarowa, a jej odkrycie wymaga odwagi i szczerości wobec samego siebie. Czy jednak obecnie ogółowi cywilizacji zależy na przechodzeniu przez takie przemyślenia? Wydaje się, że nie. To społeczeństwo stworzyło cywilizację, by zakryć ludzką naturę.

## Konrad Wierzbicki

Rozwój jest nacechowany zmianą, fizyczną lub psychiczną. Wraz z powstaniem cywilizacji wielu zaczęło patrzeć na innych, a dobro ogółu zyskało na wartości. Dzięki tej zmianie powstały pierwsze osady, które przerodziły się w miasta, a potem imperia dzielące świat. Jednak pozostaje jedno pytanie, czy rozwój cywilizacji zburzył ludzką naturę, czy tylko ją przysłonił. Przez tysiąclecia dywagowano nad zależnością kultury i natury, oraz tym, które władza człowiekiem. W XX wieku nastąpiło spektakularne zderzenie, które obrazuje druga wojna światowa.

„Władca much” Williama Goldinga po raz pierwszy ukazał się w 1954 roku, zaledwie dziesięć lat po zakończeniu drugiej wojny światowej. W swoim dziele autor przytacza historię grupy uczniów, których statek rozbił się na wyspie. Wraz z towarzyszącym im brakiem reguł czy jakiekolwiek formy autorytetu w postaci rządu czy nauczycieli, sami wykształcili swoje własne

zasady, grupy i liderów, a więc porzucili cywilizacyjne normy na rzecz instynktów i powrotu do prehistorycznych zasad. Jednak „Władca much” nie jest piękną historią o powrocie do domu i wspólnego życia w dobrobycie i przyjaźni, a dobijającą samorefleksją autora nad naturą ludzką i naszymi instynktami. Jednym z najważniejszych przekazów Goldinga jest to, w jaki sposób natura ludzka objawia się w obliczu chaosu i braku porządku. Pokazuje, jak łatwo jest nam w takiej sytuacji zrezygnować z zasad moralnych i stać się brutalnymi istotami kierowanymi przez instynkt przetrwania a nie etykę. W swojej powieści Golding wykorzystuje postaci młodych chłopców, z pozoru niewinnych, którzy po odcięciu od cywilizacji bardzo szybko rezygnują z zasad moralnych i powracają do zasad i instynktów zakodowanych w nich, co może być paralełą do szybkiej utraty niewinności, do której odarcie świata z zasad ukształtowanych przez współczesnych ludzi.

## Helena Bruździak

Słowo "cywilizacja" jest używane na różne sposoby, niektórzy widzą w nim wyznacznik postępu od "nieokrzesanego" do bardziej rozwiniętego państwa, podczas gdy inni skupią się na jego specyficznych cechach, takich jak urbanizacja i struktury społeczne. Zmiana ze społeczeństwa, które było nieokrzesane i chaotyczne, na takie, które rozkwitało i było pokojowe, jest początkiem cywilizacji. Z drugiej strony mamy do czynienia z naturą ludzką, czyli z podstawowymi cechami, zachowaniami i skłonnościami, które definiują nas jako gatunek. Historia pokazuje, że ludzie potrafili być agresywni i bezwzględni, nawet żyjąc w zorganizowanych społeczeństwach. Pojawia się więc pytanie: czy cywilizacja rzeczywiście chroni człowieka przed nim samym, czy jedynie maskuje to, co w nim najciemniejsze? W książce "Eichmann w Jerozolimie" Hanna Arendt obserwuje i komentuje proces Adolfa Eichmanna. Eichmann był urzędniki-

em, który organizował logistykę Holocaustu. Hanna Arendt w swojej książce analizuje fenomen zła w kontekście zbrodni nazistowskich. Dochodzi ona do wniosku, że зло może przybierać formę zwykłych działań biurokratycznych, a nie tylko jawnego okrucieństwa. Nazywa to "banalność zła". Eichmann nie był prawdziwym czarnym charakterem, z filmu który miał wrodzone зло, ale mechanicznie wypełnia rokazy, bez refleksji i głębszej myśli nad jego czynami pozwala systemowi prześladowań stać się skutecznym i bezdusznym. Holokaust i druga wojna światowa zaczęły się w cywilizacjach, зло nie narodziły się z braku cywilizacji, a raczej cywilizacja i biurokracia uczyniły je bardziej wydajne. Arendt zdaniem jest to, że to nie system tylko brak moralnej refleksji i rozważania swoich czynów, to właśnie czyni ludzi niebezpiecznymi. W kontekście naszego tematu cywilizacja okazuje się "opakowaniem", które przy niewystarczającej refleksji wewnętrz obnaża w środku зло.

## Czy mówimy językiem, czy język mówi nami?

### Sebastian Ruta

Od samego początku, Biblia obrazuje słowo jako nie tylko środek pisemnej lub verbalnej komunikacji, ale jako boskie narzędzie kreacji rzeczywistości. „Na początku było Słowo, a Słowo było u Boga i Bogiem było Słowo.” (J, 1,1) w tym zdaniu, które jest jednym z pierwszych w całej Ewangelii według Św. Jana, od razu tworzony jest ton, który wyciąga na wierzch słowo jako coś o niezwykłej mocy a nie jako zwykły środek komunikacji między ludźmi. Cały świat jest stworzony przez Boga używając słów. Mimo, że sam koncept świadomości lub też jej braku nie jest jeszcze bezpośrednio wypowiedziany w Biblii, czytelnik od razu odnośi wrażenie, że przemyślane użycie słów i języka jest wręcz wymagane. [...] Teorie buddyzmu są natomiast zdecydowanie bardziej bezpośrednie w kwestii samoświadomości, a praktyki tego jak obserwować mechanizmy działające we własne-

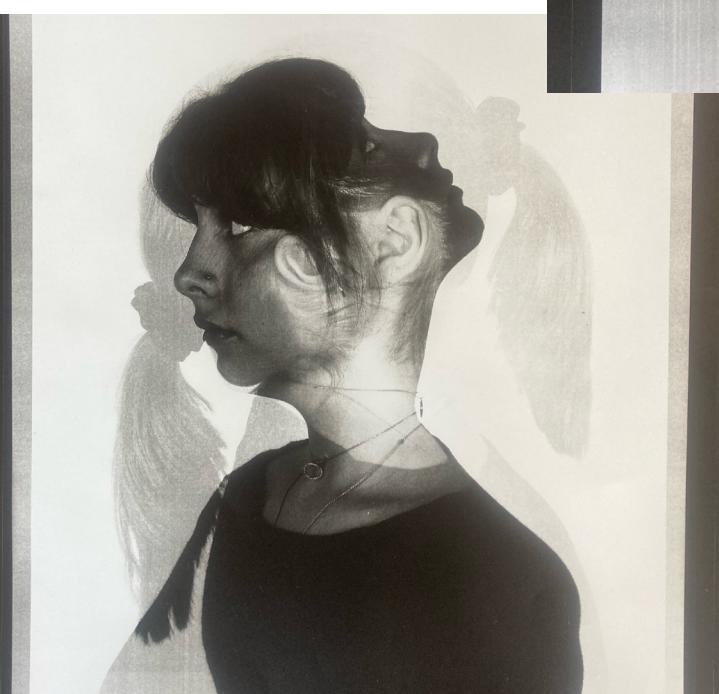
nym mózgu są często wspominane i nauczane przez Buddę. Najważniejszym jednak elementem, który w buddyzmie jest inny od tego w chrześcijaństwie, jest to, że według wyznań buddyzmu nie istnieje jedno „ja,” które miałyby być trwałym mówcą. Podstawowy tekst o anatta (właśnie braku trwałego „ja”) służy do pokazania tego. Na podstawie tego tekstu możemy stwierdzić, że człowiek jest zbiorem wcześniej wspomnianych procesów psychofizycznych (skandh), a mowa to jeden ze środków, którymi te procesy mogą się przejawiać. Z perspektywy nauki o wzajemnym powstaniu (paticcasamuppāda), wypowiedzi są wynikiem przyczyn i warunków: emocji, otoczenia, pamięci i karmicznych nawyków. W tym sensie słowa mówią nami, będąc skutkiem, nie wyborem.



# ENGLISH & DRAMA



ANIELA ZESZUTA (Y12)



# Gothic Short Stories

Last academic year, Year 10 students studied Gothic fiction and produced their own Gothic short stories. This piece by Antonina Wojtulewicz beautifully captures the atmosphere of danger and mystery which defines the genre. –

## The Poisonous Secrets by Antonina Wojtulewicz

We are to move to a grand house in the countryside tomorrow, a sanctuary William insisted upon after the dreadful failure of his experiment—an attempt to cure an affliction that instead claimed the life of an innocent woman. He spoke of the house as a place of refuge, a means to cleanse his mind of the guilt that clung to him like a relentless specter. "It will be good for you too, Josephine," he had said, his voice hollow, his gaze unfocused. "And for the baby. London is... stifling." I did not object. In truth, I welcomed the escape. The house we were leaving had begun to feel suffocating, its charm faded, its warmth replaced by something cold and unsettling.

When we arrived at the new house, my breath caught in my throat. Just as William had described it, it was beautiful, impossibly so—an architectural marvel with towering glass windows, allowing the sun to cast golden streams across the polished floors. Vines crept along its walls like nature's own delicate embroidery, and the air was thick with the scent of blooming wisteria and damp earth. It

DARIYA ARSTANBEKOVA (Y13)



looked close to a fairy tale. The weather was amazing which meant that this change was a marvelous decision. When I was yet trying to

take in the beauty of the place, a cry pierced the air. "Josephine the baby is crying!" William's voice called, meaning I would have to wait a bit to explore the rest of this amazing house.

I hurried to our child, my darling daughter, her tiny face contorted in an agony I could not comprehend. She shrieked, inconsolably, her wails slicing through the stillness like a blade. I cooed to her, rocked her, sang lullabies in hushed, desperate tones, yet nothing would soothe her. "Maybe something bit her" I thought so I called for William to examine her, but no bite or even slight rash was found. I fed her, cleaned her, and then fed her again but nothing would stop her crying. Still, she wailed, her tiny body wracked with distress. Something

was wrong. A deep-rooted dread clawed at my insides. What if she was ill? What if she does not stop crying? What if something was truly wrong? I turned to William, pleading for reassurance. "This happens to children, Josephine," he said, though his voice lacked conviction. "It's merely the change of surroundings." The nights were the worst. Sleep came in fragmented pieces, stolen away by her relentless screams. The air within the house grew thick, suffocating. I wanted to believe William. I wanted to find comfort in his words, but a gnawing unease had settled into my bones.

# Text by Isabella Hughes

*Isabella Hughes (Y13) entered this essay for the Fitzwilliam College, Cambridge, essay competition in Archaeology where it was selected as a runner-up. Ella's essay critiques the presentism which defined archaeological investigations in the nineteenth century.*

## 'Archaeology is always a presentism and has no grounding in ancient reality'. Debate with examples.

Archaeology, like other academic disciplines, is profoundly influenced by the perspectives and methodological frameworks of its practitioners. Emerging as a discipline in the nineteenth century, archaeology underwent a transformation from antiquarian pursuits to a systematic scientific inquiry into past human societies through the analysis of material remains. The investigation of ancient civilizations, human ancestors, and historical events is fundamentally reliant upon interpretive methodologies, which are inherently shaped by the prevailing cultural and epistemological con-



MAJA SADOWSKA (Y12)

texts in which they are produced. This dynamic has given rise to the phenomenon of presentism, in which contemporary values, beliefs, and practices are projected onto the interpretation of historical data. While the merits and drawbacks of presentism continue to provoke debate, a more fundamental inquiry pertains to the inherent inevitability of this practice, an

issue that has significant implications for the foundations of archaeological research.

The nature of archaeology, relying as it does on fragmented and often ambiguous remnants of past civilisations, necessitates interpretation. This interpretation is not conducted in a vacuum; it is shaped by the researcher's own methodologies, beliefs, and often the prevailing societal norms of their time. This is not inherently negative, as new perspectives can bring fresh insights, but it introduces the potential for bias. For instance, the focus on specific types of artifacts or the application of modern social constructs to ancient cultures can lead to inaccurate interpretations.

The challenge lies in recognizing and mitigating these biases, striving for a more objective understanding of the past. One prominent example of presentism in archaeology is the initial analysis of and later discourse surrounding the Birka grave Bj 581. The Viking grave was discovered on the island of Björko,

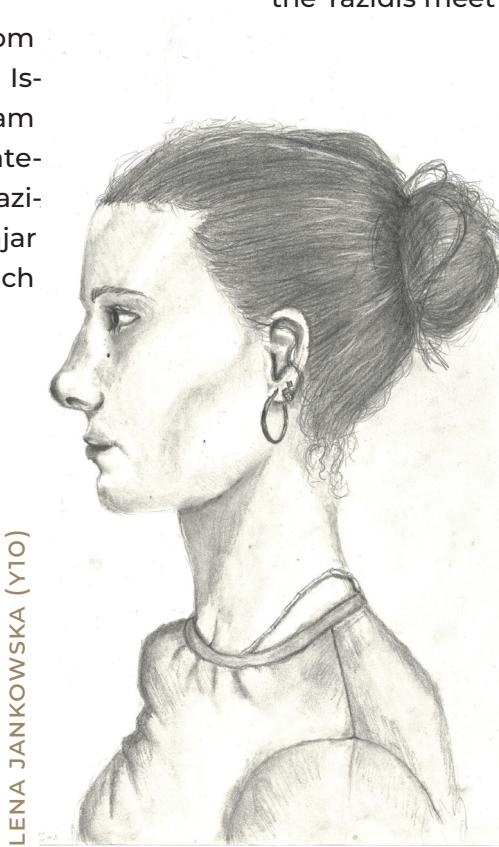
in present-day Sweden, in 1878, and was used as a model for what the graves of Vikings would have looked like. The grave included weapons including a sword and a spear, as well as the remains of two horses- items commonly associated with high-ranking Viking warriors (Koffmar, 2017).

# Text by Zuzanna Skłodowska

Year 12 students take a class in Academic Writing which develops their written English and prepares them for the university application process. In Term 1, students research a topic of their choice and write a paper; this essay by Zuzanna Skłodowska demonstrates the incredible depth of research and specialisation carried out by Akademeia students on this course.

## What are the key legal challenges associated with prosecuting ISIS members for genocide against the Yazidi population under international criminal law?

In August 2014, fighters from the Salafi Jihadist group, the Islamic State of Iraq and Ash-Sham (ISIS), initiated a violent, strategized campaign against the Yazidi community living in the Sinjar province of northern Iraq, which involved mass killings, sexual enslavement, forced conversions, abductions, and the destruction of Yazidi villages. It resulted in an estimated 400,000 Yazidis displaced, 5000 killed, and 6,800 abducted (Yazda). International organizations, including the United Nations, have widely recognized these atrocities as genocide against the Yazidis – a distinct religious and ethnic minority.



Legal accountability for such crimes against humanity and violations of International Humanitarian Law, the United Nations Genocide Convention, and the International Human Rights Law, is critical and ensures justice for the victims. The importance of this legal accountability is emphasized by various international legal frameworks, including the 1948 United Nations Genocide Convention (Convention on the Prevention and Punishment of the Crime of Genocide), which Iraq is indeed party to, and in Article II defines genocide as "crime committed with the intent to destroy a national, ethnic, racial or religious group, in whole or in part". Under this definition, the crimes committed against the Yazidis meet the criteria for genocide, and

the Iraqi government is therefore obliged to punish the perpetrators. Yet, it has been over a decade since the genocide against the Yazidis began - Iraq is still party to the UN Genocide Convention, and members of ISIS have still not been fully held accountable for their crimes, as their prosecution faces numerous challenges under international criminal law. This paper aims to examine these legal challenges, with an emphasis on jurisdictional limits and evidentiary issues.

# POETRY CLUB



# *Apollo and Daphne by Nina Patkiewicz*

*I wrote this poem after a long and tiring (albeit very pleasant) trip to the Vatican Museum in Rome, for the last sight of the day I went to the Borghese gallery. I remember I strayed from the group and our tour guide, in favour of exploring the museum at my own pace. In Borghese there are many gorgeous and intricate statues that can be called masterpieces, but this statue moved me like no other. Lights were pouring down their glow onto the marble and the flashy paintings faded into the background. It was a captivating sight, one that inspired such great awe that I could only watch and admire. Once I was able to regain my bearings I sat down on the floor and wrote any and all feelings I could process into words. And then I completely forgot about what I wrote. It was only until I came back to school and showed it to my fellow poets at the club, I was able to sit down and refine it into what it is today. I hope that it will serve as inspiration or food for thought.*



## Apollo and Daphne

And with star stricken eyes I gaze upon their visage  
the same way a believer would look upon a saint  
I would kneel looking up  
until my knees bruise and neck aches

Enchant me with thy beauty  
till my heart goes silent  
breath ceases in my chest

Let thy hair interweave with flowers and skin harden till wooden  
I would break off your branches and carve them into my skin  
paint them with my blood  
there's only one shade of crimson addictive enough to prove my adoration

It's maddening  
sickening

The way my heart clings to her like flesh claws at ribs

# CREATIVE & PERFORMING ARTS

Most people assume that being an artist requires skill and that the artistic education is largely focused on acquiring this skill. It is not an incorrect assumption, but neither it is complete. Artistic education equally requires the nurturing of imagination through learning where to look for inspirations and the building of confidence to trust in your own ideas and to how to develop them. These three pillars make the gcse and a-level art and design curriculum so inspiring for both Akademeia's students and teachers. As education progresses students deliver projects that are uniquely their own in media of their choosing. The wide range of concepts and artistic mediums in this years gcse and A-level cohorts ranging from ones focusing on marine life to book illustration to architecture and ideas about nostalgia or gender in sculptur, drawing, photography and film, proves the success of this approach. I am thrilled to accompany the students on their journeys and build confidence for further future achievements.

Magdalena Strzelczak – Head of Creative and Perfoming Arts



MAJA MAZUREK (Y11)



MAJA SADOWSKA (Y12)



ZOFIA MICHNOWSKA (Y13)



ZOFIA ZARGANIS (Y9)



DARIYA ARSTANBEKOVA (Y13)



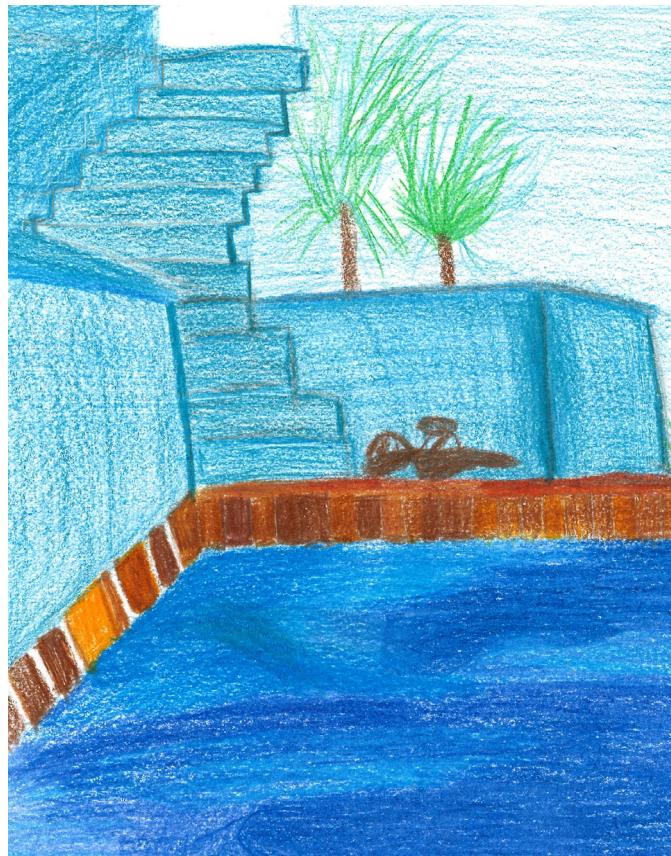
ŁUCJA KUSIAK (Y10)



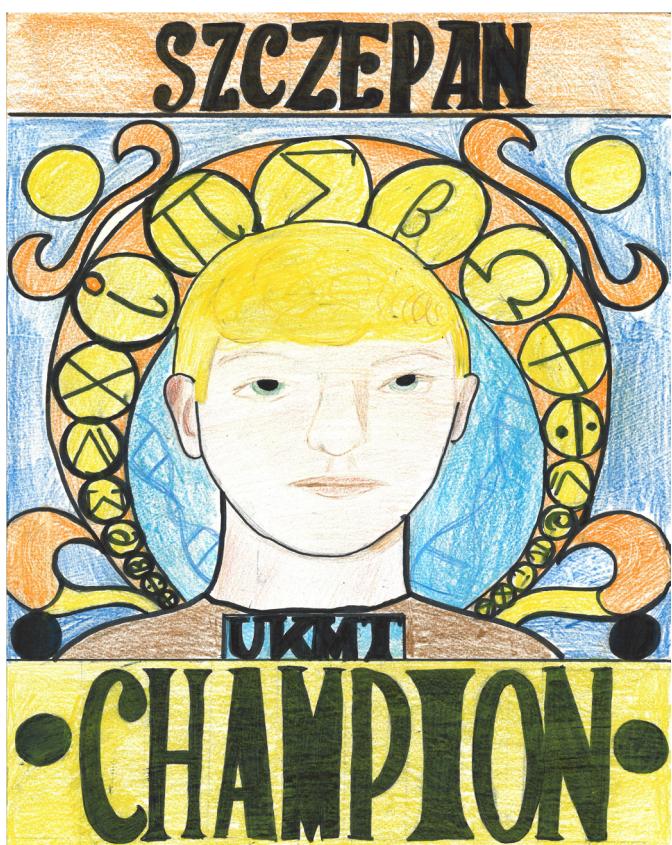
ALICJA GOŁĄB-GŁAZ (Y9)



MAJA SADOWSKA (Y12)



JULIA WASIAK (Y9)



ARTSIOM ZAVIARZHENETS (Y10)



MARIKA LUBAS (Y9)

# HUMAN & SOCIAL SCIENCES



KORNEL ŚWIERCZYŃSKI (Y9)

# HISTORY

## Early standardization – the Qin Dynasty

Chinese characters are logographs - symbols that carry meaning rather than sound. But before these characters could be used in a unified China, they first had to be unified themselves. In the centuries before the Qin Dynasty, writing systems varied widely between regions. Characters differed in form and structure depending on the state, making communication difficult across the vast territory.

This changed significantly when Qin Shi Huang established the first centralized imperial government in 221 BCE. Determined to bring order and uniformity to all aspects of life, the emperor saw language as a critical part of national unity. In order to achieve this, he assigned his chancellor, Li Si (李斯), to carry out the first government-led standardization of Chinese characters.

Under Li Si's direction, the Qin administration introduced the Small Seal Script (小篆, xiǎozhuàn) as the empire's official script. This script was not invented from scratch but refined from earlier writing styles into a uniform system. It featured consistent stroke patterns and rounded forms, designed to be legible and standardized across all regions. From legal codes and government records to stone inscriptions and weights and measures, this script was used to unify written communication throughout the empire.

The effects were visible both practically and symbolically. For the first time in Chinese history, a shared writing system allowed for consistent administration, legal enforcement, and cultural messaging across formerly divided states. Standardized characters helped ensure governance was running smoothly and reinforced the authority of the central state, projecting the emperor's reach not only through armies and roads, but through written expression too.

Though the Qin Dynasty lasted only until 207 BCE, its language reforms left a lasting legacy. This early standardization laid the groundwork for future developments in Chinese script, helping to shape the written language used across China for centuries to come. It marked a pivotal moment when the written word became an instrument of imperial unity, and a foundation of Chinese civilization.

Zuzanna Skłodowska

# SOCIOLOGY



## The Emotions Behind Calling Pets ‘Children’

I am sitting on a couch with my two sisters as I write this essay. Though they are dogs, they are my siblings, semantically, since my mom refers to them as her daughters. What emotions drive this behaviour? For my mom, it seems to stem from a deep need to express how valuable these pets are to her and to position herself in contrast to those who still adhere to Descartes’ attitude towards animals.<sup>1</sup> However, pets occupy roles far beyond their traditional function as companions or workers. Increasingly, pet owners refer to their furry friends as “children,” a linguistic choice that reveals much about the evolving relationship between humans and animals. This anthropomorphism reflects complex psychological underpinnings but is not without controversy, as it evokes criticism from some social and cultural groups who argue against such humanisation.<sup>2</sup>

At the heart of this phenomenon lies the human need for emotional connection. Pets provide unconditional love, comfort, and a sense of security, often filling roles similar to those of human family members. The deep bond between humans and animals, particularly in Western cultures, is evidenced by the billions of dollars spent annually on pet care, from gourmet foods to medical treatments, paralleling how parents care for their children (Walsh, 2009). This bond has led to an increasing number of people identifying their pets as their children, reflecting a parental instinct to nurture and protect. For some, this is a deliberate choice, particularly in households without children, where pets act as substitutes, fulfilling psychological and social needs (Serpell, 1996). The psychological comfort derived from such relationships is undeniable,

providing companionship in lonely times and alleviating mental health conditions such as anxiety and depression. Some may argue that referring to pets as “sons” and “daughters” is merely a matter of words, but referring to pets as “children” may intensify the emotional impact of their loss. Owners who perceive their pets this way may experience grief similar to that felt when losing beloved family members (Field et al., 2009).

However, critics point out that anthropomorphising pets challenges deeply held beliefs about animal roles, evoking strong emotional reactions. Some cultural and religious groups view it as diminishing the dignity of human relationships, while others emphasise the utilitarian roles of animals. Ethicists warn that conflating human and animal roles may overshadow critical issues such as cruelty and exploitation, fuelling debates over the moral implications of such behaviour (Serpell, 1996). These tensions highlight the emotional complexity of anthropomorphism.

Despite criticisms, the practice of calling pets “children” underscores a profound psychological need for emotional fulfilment. It reflects the deep joy, love, and sense of purpose that pets bring to their owners, serving as an outlet for caregiving instincts and a way to combat loneliness. For many, such language symbolises a unique emotional bond that provides comfort and meaning in a world that often feels isolating. As humanity continues to explore the nuances of human-animal relationships, this evolving dynamic highlights an enduring emotional drive to connect, nurture, and share love across species boundaries. Referring to pets as “children” symbolises a deep integration of animals into human families and is entirely acceptable, provided pets are still “allowed to remain animals”.

## Mooting Mayhem: When Students Took on the State (and Won)

In an electrifying culmination of months of legal debate, research marathons, and a few too many dramatic "Objection, Your Honour!" outbursts, the Akademeia Mooting Club held its final moot court of the year – tackling none other than the highly contentious case of Shamima Begum v The Secretary of State.

You may remember Begum as the British teenager who left for Syria in 2015 to join ISIS, later seeking to return to the UK after the fall of the so-called caliphate. The UK Home Secretary stripped her of citizenship on national security grounds – sparking a fierce legal and ethical debate across the country.

Taking to the mock courtroom were a cast of formidable young legal eagles: Oliwia, Zuzia, Lena, Matylda, Hania, Zosia, Leopold, Michal, Bohdana and Mariia, who acted as defence, prosecution, and witnesses with a flair that would make a QC weep.

Presiding over the proceedings were Lady Justice Świątek, Lady Chlebek, and Lord Śliwiński (donning imaginary robes and very real gravitas). After intense argumentation, the court quashed the Secretary of State's decision. They ruled that while national security is paramount, the evidence presented was insufficient to prove that Begum poses a current threat. And crucially, they affirmed her right to return to the UK to appeal – a bold, principled stance that prioritises the rule of law and due process over knee-jerk political expediency.

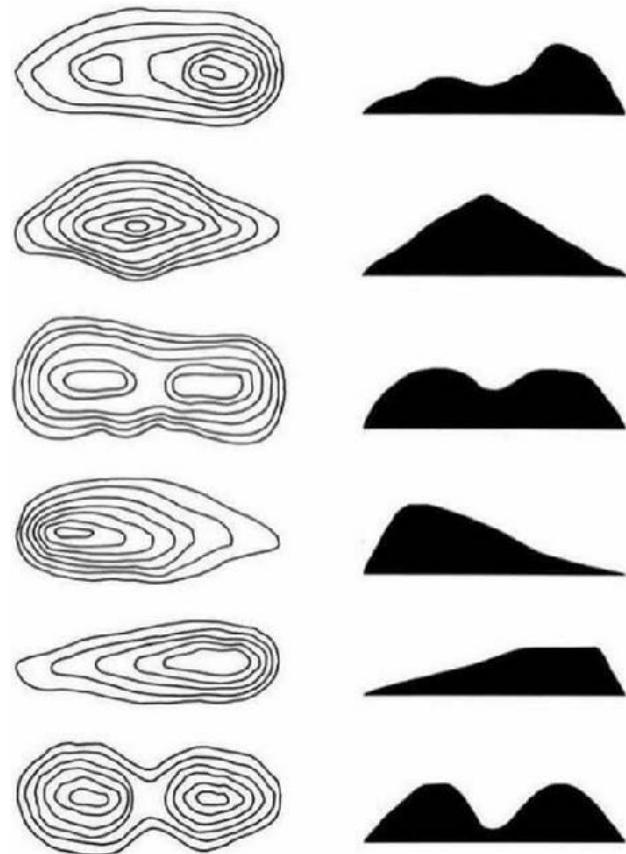
In their own words, "Nothing in this judgment exonerates the Appellant or excuses her conduct... However, such accountability must

take place within the bounds of British justice." The message? Justice isn't about who you sympathise with - it's about applying the law fairly, even when it's uncomfortable.

The final verdict wasn't just a legal outcome – it was a mirror reflecting the values of this generation: critical thinking, moral nuance, and a refusal to let fear undermine fundamental rights. Who knew hypothetical court could feel so real?

So here's to the mooters – future lawyers, judges, and world-shakers. When they say "Order in the court!", you'd better listen. They just might be right.

**Ms Aleksandra Ladzińska**



MAJA SADOWSKA (Y12)



## JUDGEMENT

**For Shamima Begum (Appellant) v The Secretary of State (Respondent)**

Judgement given on

**11 June 2025**

*Before*

Lady Justice Świątek

Lady Chlebek

Lord Śliwiński

This appeal concerns the decision of the Secretary of State for the Home Department to deprive the Appellant, Ms Shamima Begum, of her British citizenship under section 40(2) of the British Nationality Act 1981.

AFTER CONSIDERATION of the Appellant's permission to appeal against the judgment of the Court of Appeal and the submissions filled by the Respondent and the Interveners

THE COURT ORDERED that the decision of the Secretary of State to deprive the Appellant of her British citizenship be QUASHED.

THE COURT FINDS that the Home Secretary is entitled to take steps in safeguarding national security. In this case, the evidence presented by the Respondent was insufficient to establish that the Appellant presents a current threat to the national security of the United Kingdom.

The matter be REMANDED to the Secretary of State for reconsideration in accordance with the Court's judgment.

The Appellant be PERMITTED to return to the United Kingdom in order to effectively exercise her right of appeal.

Nothing in this judgment exonerates the Appellant or excuses her conduct. The UK authorities will pursue criminal prosecution and Ms Shamima Begum will face legal consequences for any offence she may have committed. However, such accountability must take place within the bounds of British justice, and with the Appellant subject to the jurisdiction of the UK as a British citizen.

*Karolina Świątek*

# HISTORY OF ART



MAJA SADOWSKA (Y12)

## Being vs Becoming: Exploring Emerging Artists

Recently I happened upon a Cuban artist whose pieces I have seen categorised under Surrealist depictions; intriguing. A joke I once saw came to mind:

Question: "How many Surrealists does it take to change a lightbulb?"

Answer: "A fish."

Regardless of occasionally being categorised in such a way, Denys Molerio Peña's works move beyond traditional Surrealism's aims, for instance, to revolutionise human experience, asserting the power of the unconscious and dreams. They exist on the border between reality and psychological tension, evoking a feeling of the uncanny without, however, departing completely from the visible world; they significantly interact with the human form, encompassing both its internal and external aspects.

In my opinion, the artist reveals the human inner world—emotions and feelings that everyone has experienced at least once in their life. He presents something that everyone can relate to, regardless of how they interpret it, as I believe there isn't a single correct way to read these pieces.

The artist's biography states, "The whole work of Denys Molerio Peña is essentially a discourse on the nature of what is and isn't portraiture." I see it as an attempt to redefine identity of the portrait's sitter, which is revealed in the interplay between the characters and the environments they create.

The titles of Peña's works are just subtle guides in orienting one towards the reception of the works. *The Pursuit of Awareness* has a

figure clutching very tenderly a crumpled mass of fabric, perhaps seeking something elusive, perhaps the very layers of consciousness.

For instance, when I look at the piece titled "The Pursuit of Awareness", what captures my attention are the arms—female hands that appear strong, perhaps even manly—where every finger is clutched tightly onto the pillow. The face doesn't convey emotion and might even seem at peace; however, when your gaze moves downward to the bottom of the canvas, the psychological state begins to emerge. She looks as if she was holding onto something dear and precious—maybe even holding onto herself, trying not to lose her mind. From a psychological perspective—through the lens of "theory of mind"—I assume that the person I'm looking at has a mind, there is cognition behind the stillness; she is thinking.

This piece, from the viewer's perspective, opens doors to interpretation, which will definitely be influenced by our own past experiences. This personal viewpoint makes such pieces unique and deeply intimate, allowing each viewer to form their own emotional connection and meaning based on what they bring into the experience.

The way the artist shows suspension of emotion—in unspoken gestures, glances, or lips subtly parted—allows much room for one's own reflection and imagining. Such details—from the plasticity of hand to ghostlike passing glance—raise not only aesthetic considerations but self-consideration as well.

I guess the questions that Peña asks in his artworks deal with what self-awareness is and how we see others and ourselves. The images do not give easy answers to questions—instead they immerse the viewer in the process of how one becomes and confronts one's own existence on the border of the known and unknown.

As you look through these images, be open to this confrontation.

# PSYCHOLOGY



KLARA BAKIĆ-PAWLAK (Y10)

# Interview by Emilia Kosiorek (an excerpt)

## “IN DEFENCE OF REASON” – Pseudoscience and the sins of scientists

Disclaimer: Whenever the text refers to *Forbidden Psychology*, it denotes the original Polish series titled “*Zakazana Psychologia*”. The English-language books that address the same themes are “*Psychology Gone Wrong: The Dark Sides of Science and Therapy*” and “*Psychology Led Astray: Cargo Cult in Science and Therapy*”. However, these are not literal translations — the original Polish version consists of three volumes, while the English edition comprises two.

Flat Earthers, reptilians, chemtrails, and the allegedly still-living Elvis Presley are, for the majority of society (thankfully!), nothing more than laughable conspiracy theories. You don’t need a PhD to know that. But when we start talking about homeopathy, fortune-telling, neurolinguistic programming (NLP), Hellinger’s family constellations, bioenergy therapy, or astrology, it’s no longer as clear to everyone that these are nothing but pseudoscience. These more or less obviously nonsensical ideas share several common features: lack of repeatable research results (or lack of research at all), appeals to “secret knowledge,” “energy,” or “intuition,” resistance to criticism (every question is perceived as an attack), or conscious avoidance of scientific studies — “because the system doesn’t want you to know the truth.” Nevertheless, some of these theories and practices not only function successfully in society but have also entered the halls of academia, such as NLP, which is taught at the university level in Poland. A clairvoyant can be summoned as a professional witness

in a court case (yes, that’s an actual job!), and homeopathic substances are recommended by general practitioners and are available in pharmacies.

True science comes to the rescue of reason. It’s based on years of research verifying the truth of hypotheses, on the reputation of the institutions conducting the research, on the names of well-known scientists, and above all, it’s empirically confirmed. But is that always the case? In physics or chemistry, if a scientist makes a mistake in research, practical experience quickly reveals it, whether the error was intentional or not. However, in the broad domain of social sciences, including psychology, sociology, or economics, detecting errors, abuses, or fraud is neither fast nor obvious. What’s more, repeating the results and interpretations of such flawed studies can lead to very serious consequences. Imagine an ineffective therapy administered by a psychotherapist — at best, it simply doesn’t work, but at worst, it could lead to suicide.

It is precisely about pseudoscience and the sins of real science that we learn from the “*Forbidden Psychology*” series by Dr Tomasz Witkowski. The books in this series were published some time ago but have gained new life, and their content and message have the potential to reach a wider audience thanks to audiobook editions on Poland’s largest platforms.

However, the series isn’t just about psychology. It’s an attempt to expose and confront pseudoscience and the unreliability of scientists in various fields, though mainly within the social sciences. Readers who have so far admired the genius of Sigmund Freud or the brutal truth about human nature presented in Philip Zimbardo’s *Stanford Prison Experiment* may need to revise their views.

One particularly fascinating and shocking story is the brilliant hoax carried out by Dr Witkowski in the well-known Polish popular science magazine *Charaktery*. Disguised as a non-ex-

istent French female scientist, he managed to publish an article about a therapy based on morphic resonance, which he had entirely made up. The very fact that this hoax succeeded, and the, let's say, "casual" approach of Charaktery's editorial board, is deeply concerning. Awareness that such a thing could happen in a magazine whose scientific board includes PhDs and professors raises serious questions about the reliability of scientists and forces us to ask: where should young researchers turn for trustworthy knowledge and role models?

All of the above prompted me to speak with Dr Witkowski. I hoped the conversation would restore my faith in science — a faith that had been somewhat shaken after reading *Forbidden Psychology*. Did it? Let's find out.

**Emilia Kosiorek:** Our conversation is inspired by your series *Forbidden Psychology*, in which you describe how pseudoscience, as well as negligence and plain fraud, infiltrate science. Do you believe this problem concerns mainly psychology, or should we assume that people are people and fraudsters can appear in every field — medicine, physics? Are the social sciences more vulnerable to such behaviour?

**Tomasz Witkowski:** The degrees of scientific dishonesty certainly vary between disciplines, but in my view, it exists everywhere. Social sciences are indeed somewhat more susceptible because, broadly speaking, science can be divided into so-called "hot" and "cold" disciplines. The hot sciences have direct and immediate applications, such as market value or technological impact — fields like genetics, theoretical physics, etc. When results are published in those areas, they are quickly replicated and verified because a specific result directly leads to progress. In contrast, in disciplines like psychology, sociology, or even economics, verification doesn't happen as rapidly, which is why various types of fraud can remain unnoticed for a long time.

**EK:** So, in the 21st century, is it still worth becoming a scientist, especially a scientist in the social sciences? Many young people choose to study psychology, social and behavioural sciences, and economics. Are they making the right choice?

**TW:** Absolutely. Science is one of the most fascinating endeavours a person can engage in. Perhaps art is just as intriguing. As for social sciences, last year Geoffrey Hinton, a cognitive psychologist, was awarded the Nobel Prize in Physics for his work on neural networks that led to the development of artificial intelligence. AI would never have emerged without input from psychologists, who have provided insight into how our minds and nervous systems function and how we process information. One could say that the social sciences have contributed significantly to what we're experiencing today. The opportunities for work and discovery are tremendous, and I wholeheartedly believe it's worth studying social sciences. Of course, one should engage in rigorous, mainstream science — and in psychology, preferably not the kind devoted to inventing next therapeutic modalities.



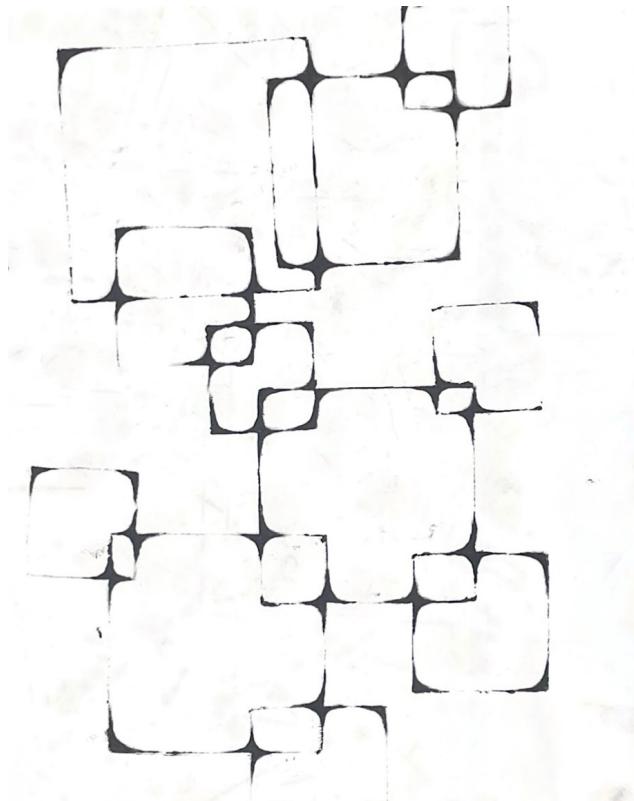
MAJA SADOWSKA (Y12)

# RELIGIOUS STUDIES & PHILOSOPHY

## Student Reflection by Helena Jurczak Y11

I remember saying that Religious Studies and Philosophy was shattering my mindset one day, rebuilding it another, and knocking it down again the next day. It was a class that completely changed my understanding of the world around me. It was not only intellectually demanding but also personally transformative. It continually pushed me towards a reevaluation of my assumptions about belief and morality. We started by trying to define religion and tracing its origins, which provoked discussions (both in and outside of the classroom) about self-conscious attitude to personal beliefs and non-beliefs: instead of seeing religion as something external or “for others,” it became possible to see parallels of it in modern structures that function in similar ways. The exploration of moral systems later in the year sharpened my awareness of the tension between individual flourishing and social order and led to more critical reflection on moral intuitions around me. To conclude the course, we prepared a presentation on secular substitutes of religion. My final presentation on religious mechanisms in the 2025 Polish presidential elections was a turning point for me, as it required applying course concepts to a context that is both personal and politically immediate. Comparing candidates’ campaigns to Catholicism through themes such as symbolism, accessibility, social unity, and social control made it visible how religious structures appear in places usually labelled as secular. This not only deepened my understanding of politics but also prompted a more reflective stance toward personal po-

litical sympathies and antipathies. Designing that project strengthened my confidence in independent research, synthesis, and critical argumentation. It also furthered my perspective on how the terms connected to Religious Studies and Philosophy are not confined to abstract and distanced debates but can be used to analyze current events. Overall, the course was not just interesting academically; it also challenged me and then taught me how to build a worldview. I feel that it boosted my growth, not only as a student, but also as a person. I learned about the world around me, how it is perceived from different perspectives and how it can be changed, and this what will remain most important to me beyond the classroom.

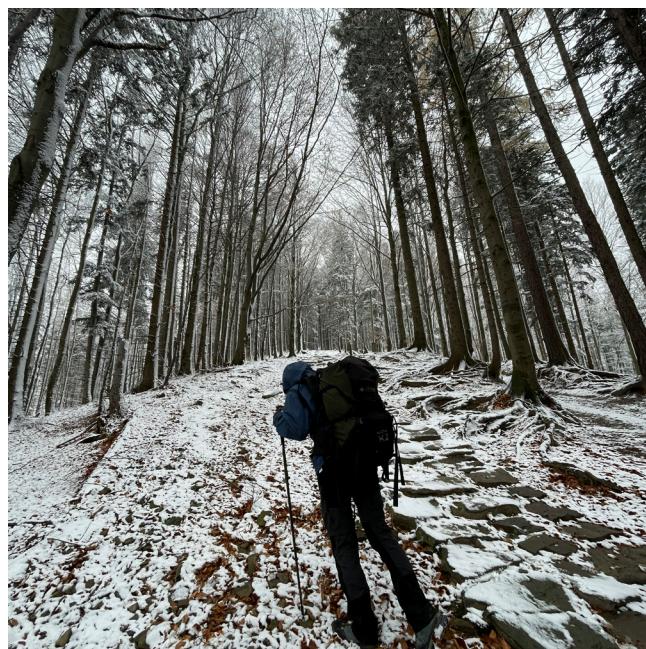


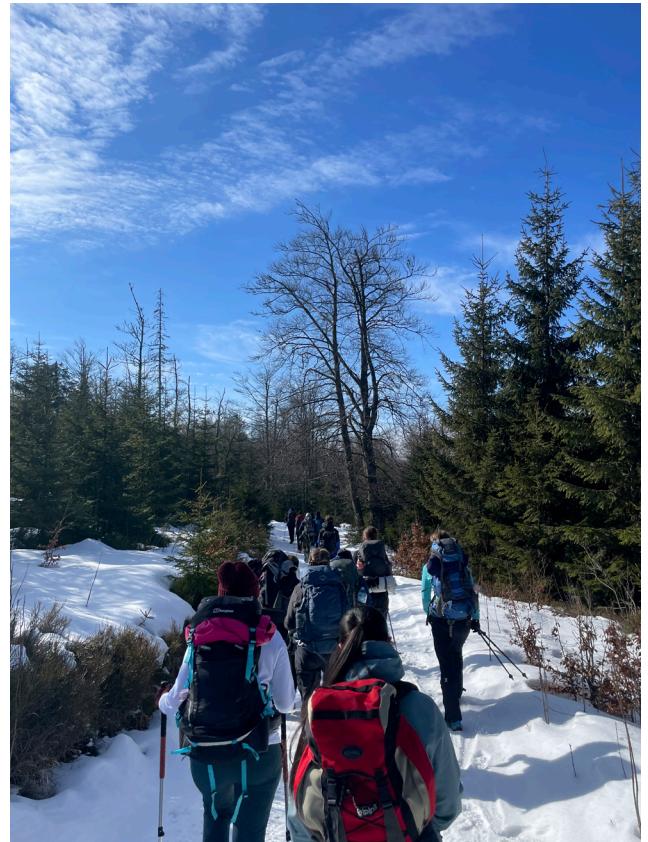
MAJA SADOWSKA (Y12)





# SPORTS





# HIKING TRIPS





# CHRISTMAS FAIR





WOŚP





# LITTLE SHOP OF HORRORS MUSICAL





# AKADEMEIA FUNDRAISER FOR SCHOLARS





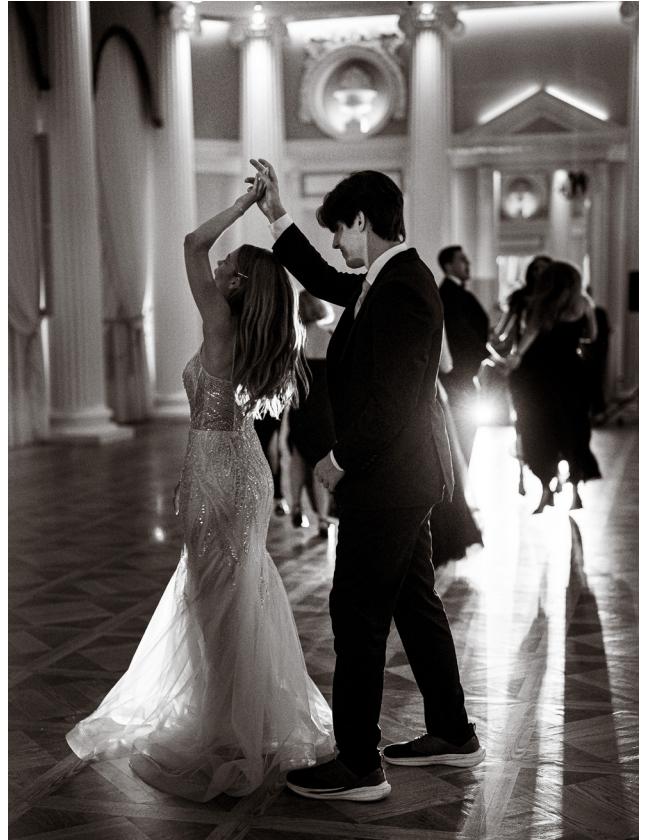
# LEGO LEAGUE





# GRADUATION





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# END OF YEAR

