

Geodesy Students' Club - How to Show Practical Activities in the Modern World of Geodesy

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Key words: talent, modern surveying, success, inspiration, kindness.

SUMMARY:

Stowarzyszenie Geodetów Polskich, kilkanaście lat temu wsparło międzyuczelniane, studenckie kluby Geodezyjnych Kół Naukowych oraz powołało krajowe spotkania tych klubów. Celem tych spotkań, naukowych, była i jest wspólna wymiana doświadczeń młodych geodetów oraz ukierunkowanie ich działań we współczesnym świecie geodezji.

Obecnie te młode osoby zupełnie inaczej rozumują oraz interpretują możliwości jakie daje podstawowa i wyższa wiedza geodezyjna. Znajdują wiele ciekawych zastosowań we współczesnym świecie. Samo napisanie aplikacji lub analiza danych nie daje satysfakcji, bo sprawczość działania, zastosowanie praktyczne lub sponsor zainteresowany tym pomysłem w pełni rozbudza działanie. I tu jest nasze działanie.

Połączenie ambicji tych młodych ludzi, ich pracy, z potrzebami jakie ma ówczesny świat jest, w mojej ocenie znaczącym krokiem. **Krokiem jaki powinien być postawiony przez młode pokolenie geodetów.** Tu trzeba pomóc w kojarzeniu pracodawców i pracowników. Potrzeb rynku i efektów eksperymentów i badań na uczelniach. Oczekiwań społeczeństwa i efektu nauki wyższych uczelni. Czy to w urzędach, firmach lub w codziennym życiu – to my geodeci wiemy jak zinterpretować dane, pozycje XYZ lub jak podejść po inżyniersku do naszego świata.

Ta prezentacja ma na celu pobudzeni do działania naszych stowarzyszeń, lokalne firmy i uczelnie wyższe w celu praktycznego kooperowania i działania. Kto by nie chciał mieć dobrego pracownika? Kto by nie chciał mieć swojego patentu lub sukcesu? Tu jest klucz do tych kroków. Studenci przyjeżdżają z innych miast na studia. Nie znają lokalnego rynku pracy, organizacji geodezyjnych i problemów z danych obszarów nauki. Tu postrzegam szansę na wyłowienie talentów, ludzi pracowitych oraz rozwój naszej organizacji. Poprowadzenie młodej

osoby po arkanach naszego zawodu daje nam szansę budowania naszej społeczności. Dysponuje pełnym doświadczeniem jak tego typu działania prowadzić i ta prezentacja ma na celu pobudzić innych do takiego zorganizowanego, systematycznego działania. Jestem przekonany, że nasz świat ma co zaoferować dla tamtego, tamtego ich świata.

Event:	FIG Working Week 2024 in Accra, Ghana
PubID:	12536
Status:	Regular accepted

The Association of Polish Surveyors, more than a dozen years ago, supported intercollegiate student clubs of Surveying Scientific Circles and established national meetings of these clubs. The purpose of these meetings, scientific as they are, was and is to share the experiences of young surveyors and to guide their activities in the modern world of surveying.

Today, these young people have a completely different understanding and interpretation of the possibilities offered by basic and higher geodetic knowledge. They find many interesting applications in the modern world. Just writing an application or analyzing data does not give satisfaction, because the causality of action, practical application or a sponsor interested in the idea fully awakens the action. And this is where our action comes in.

Combining the ambitions of these young people, their work, with the needs that the world of the time has is, in my opinion, a step. A step that should be taken by the young generation of surveyors. Here it is necessary to help match employers and employees. The needs of the market and the effect of experimentation and research at universities. The expectations of the public and the effect of the science of universities. Whether in offices, companies or in everyday life, we surveyors are the ones who know how to interpret data, XYZ positions or how to approach our world in an engineering way.

This presentation aims to stimulate our associations, local companies and universities for practical cooperation and action. Who wouldn't want to have a good employee? Who wouldn't want to have their patent or success. Here is the key to these steps. Students come from other cities to study. They don't know the local labor market, surveying organizations and problems in the given areas of science. Here I see an opportunity to fish out talent, hard-working

people and develop our organization. Guiding a young person through the arcana of our profession gives us a chance to build our community.

I have full experience of how to conduct such activities, and this presentation is intended to stimulate others to such organized, systematic action. I am convinced that our world has something to offer to that world, their world.



1. The beginning.

The idea of an organization bringing together geodesy students from all over Poland was born in 2001. The need to create such an organization resulted from insufficient, in the opinion of students, contacts between geodetic departments operating at various Polish universities. Additionally, the following years showed the need to better navigate the entire geodetic community, and the idea of getting to know one's future employers and the structure of geodetic contracting and offices, already during studies, fit well. And little is said about these areas during studies. This idea aroused great interest among the authorities of the Association of Polish Surveyors. Therefore, it was decided to create a Students' Club operating within the Association.

The National Geodesy Students' Club was officially established on April 9, 2002.



2. Why do we need such an organization? What are its goals and assumptions?

The National Geodesy Students' Club organizes joint meetings and training, as well as projects and scientific research aimed at exchanging scientific and technical ideas between students. The statute also includes assistance for students. The largest undertaking is the annual National Conference of Student Scientific Geodetic Clubs. Recent years have included inviting surveying companies and expanding - intergenerationally - the experience of the measurement community. At the SGP Delegates' Meeting in June 2004, a project was created to ensure that students from the 3rd year of studies and members of the Club were also members of the SGP. This project was unanimously adopted at the SGP Meeting in Warsaw on October 21, 2004.

The goals of the Club are - according to the Regulations:

1. Expanding knowledge in the field of broadly understood geodesy,
2. Establishing cooperation with geodesy circles and organizations operating at Polish universities and abroad,

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3. Creating a representation on behalf of students of geodetic fields in cooperation with the Main Committees of the SGP and other organizations related to geodesy,

4. Helping students and graduates of geodesy and related fields, exchanging experiences and information.

From a practical point of view, which is how I like to approach the issue the most, during meetings and exchange of experiences like this one can see where the direction of teaching is going, because the works illustrate this state of affairs. Additionally, students look out into the world and see their potential future jobs and can meet future employers, which was not the case for years. Another phenomenon that is already clear to me is meeting the best, most ambitious, inquisitive and truly interested students. YES, they are presented here and more and more companies are looking for their potential employees. Universities provide opportunities for those who may develop their scientific interests in the future. From my observations, I know that there are also the beginnings of such young student companies and start-ups here. And the rebellious thought and the formation of new things that are coming to the market are clearly visible here. IT'S WORTH BEING HERE!



3. Organizational structure and its members.

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The Board of the National Geodesy Students' Club (OKSG) is elected for a period of one year and usually serves the winner of the national student meetings competition. Currently, the Presidency for the academic year 2023/2024: Student Scientific Circle "GeoPixel" from the Military University of Technology, where the president is Marek Weis, the vice-president is Maja Walasik, the secretary is Kinga Kłos and Karol Korolczuk.

The club brings together students:

- Politechniki Warszawskiej:
 - Stowarzyszenie Studentów Wydziału Geodezji i Kartografii PW „GEOIDA”, (od 2002 r.)
- Akademii Górniczo-Hutniczej w Krakowie:
 - Koło Naukowe Geodetów „Dahlta”, (od 2002 r.)
- Uniwersytetu Rolniczego w Krakowie:
 - Koło Naukowe Geodetów UR, (od 2002 r.)
- Uniwersytetu Przyrodniczego we Wrocławiu:
 - Studenckie Koło Naukowe Geodetów, (od 2002 r.)
- Politechniki Wrocławskiej:
 - Koło Naukowo-Badawcze GIS, (od 2002 r.)
 - Koło Naukowe Grupa Młodych Geodetów,
- Uniwersytetu Warmińsko-Mazurskiego w Olsztynie:
 - Międzynarodowe Koło Geodezji Satelitarnej i Nawigacji „GeoSiN”,
- Wojskowej Akademii Technicznej w Warszawie:
 - Koło Naukowe Studentów „GeoPixel”, (od 2009 r.),
 - Koło Naukowe Studentów Rozpoznanie Obrazowe (od 2022 r.),
- Uniwersytetu Przyrodniczego w Lublinie:
 - Geodezyjne Koło Naukowe „Equator”,
- Akademii Morskiej w Szczecinie:
 - Koło Naukowe Geodezji i Kartografii „METIRI”,(od 2022 r.),
 - Koło Naukowe Hydrografii Morskiej, (od 2022 r.),

- Politechniki Rzeszowskiej:
 - Koło Naukowe Geodetów GLOB,
- Politechniki Gdańskiej:
 - Geodezyjne Koło Naukowe „Heweliusz”



4. Geo - Azymuty

The aim of the plebiscite is for students from all over Poland to select what they consider to be the most outstanding personalities and achievements in the field of geodesy and cartography. Candidates for the plebiscite are nominated by Student Scientific Clubs, and the winners are selected in a majority vote by students belonging to the National Geodesy Students Club.

The "Geo Azymuty" plebiscite is held as part of the activities of the National Geodesy Students' Club, which constitutes the plebiscite chapter, and the Dahlta Scientific Circle of Surveyors, which is its organizer. The idea of the Plebiscite was initiated during the National

Meeting of Geodesy Students in Gliwice on December 16, 2011. by the originator of the plebiscite, Mirosław Marciniak.

GeoAzymuty



Celem plebiscytu jest wyłonienie przez studentów z całej polski najwybitniejszych ich zdaniem osobowości oraz dokonań w dziedzinie geodezji i kartografii. Nominacji kandydatów do plebiscytu udzielają Studenckie Koła Naukowe a Laureatów wybierają w głosowaniu większościowym studenci należący do Ogólnopolskiego Klubu Studentów Geodezji.

Plebiscyt „Geo Azymuty” odbywa się w ramach działalności Ogólnopolskiego Klubu Studentów Geodezji tworzącego kapitułę plebiscytu oraz Koła Naukowego Geodetów Dahlta będącego jego organizatorem. Idea Plebiscytu została zainicjowana podczas Ogólnopolskiego Spotkania Studentów Geodezji w Gliwicach 16 grudnia 2011r. przez pomysłodawcę plebiscytu Mirosława Marciniaka.

Mamy nadzieję, że zapoczątkowana przez nas inicjatywa zyska spore zainteresowanie zarówno wśród studentów jak i środowiska geodezyjnego z całej Polski. A nasze wydarzenie na stałe wpisze się w geodezyjny kalendarz, ciesząc się coraz większym uznaniem.

Mirosław Marciniak
AGH Kraków

5. Direct access to specialized press, industry magazine **Przegląd Geodezyjny**.

Ogólnopolski Klub Studentów Geodezji OKSG
8 czerwca 2023 · 🌐

Podsumowanie najważniejszej studenckiej konferencji geodezyjnej roku ukazało się w [Przegląd Geodezyjny](#) 📄
Jeszcze raz dziękujemy wszystkim za udział 🙏

OKIEM STUDENTA GEODEZJI

Weronika LIS
Współpraca KNIH GIS
Wydział Geoinżynierii, Górnicztwa i Geologii
Politechnika Wrocławska

XVII Ogólnopolska Konferencja Studentów Geodezji za nami!

W dniach 27 – 28 kwietnia 2023 roku po raz pierwszy na Politechnice Wrocławskiej odbyła się XVII Konferencja Ogólnopolskiego Klubu Studentów Geodezji.

Jako Koło Naukowe – Badawcze GIS im. dr. Józefa Woźniaka jesteśmy dumni z roli organizatora Konferencji Ogólnopolskiego Klubu Studentów Geodezji. Było to wyjątkowe wydarzenie, które zgromadziło studentów z różnych uczelni z całej Polski.

Członkowie Koła przejęli odpowiedzialność za planowanie, koordynację i realizację konferencji, zapewniając płynny przebieg wszystkich sesji, warsztatów i wydarzeń towarzyszących. Dzięki ich zaangażowaniu i wysiłkom, konferencja OKSG stała się platformą dla wymiany wiedzy, inspirujących dyskusji i integracji między młodymi badaczami.

Kwietniowa Konferencja była niesamowitym sukcesem i dostarczyła uczestnikom nie tylko wiedzy, ale przede wszystkim wartościowych kontaktów i doświadczeń.

Przegląd Geodezyjny
7 czerwca 2023 · 🌐
Studenci Geodezji zrobili naprawdę kawał dobrej roboty.

6. Last event, 2023.

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The last meeting of OKSG students took place in Wrocław, at the Wrocław University of Science and Technology. Support came from the Provincial Surveyor of Lower Silesia, the local branch of the Association of Polish Surveyors, Softline, a producer of software for surveyors, and myself.



Scientific and technical committee assessing the works:

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The work was awarded by the main sponsor, ESRI.



All winners, committee and sponsors.

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Honorary patronage of the Chief Surveyor of the Country.

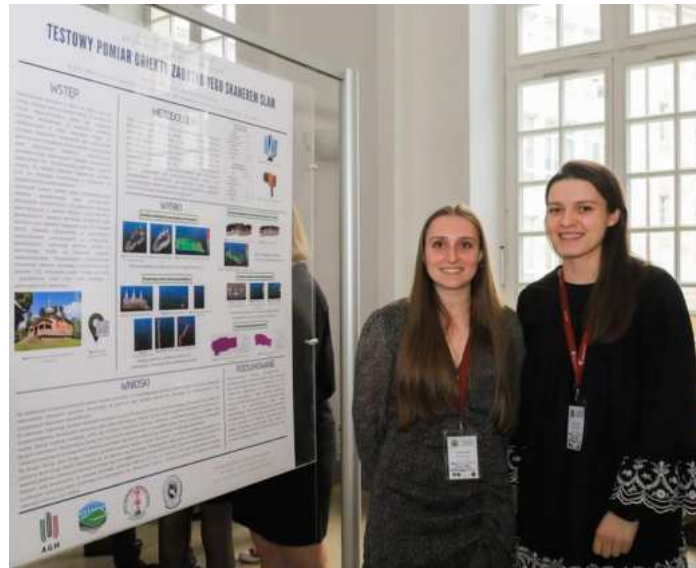


Example – poster:



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Event organizers 2023:



Grand opening:

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Sponsors ;-)

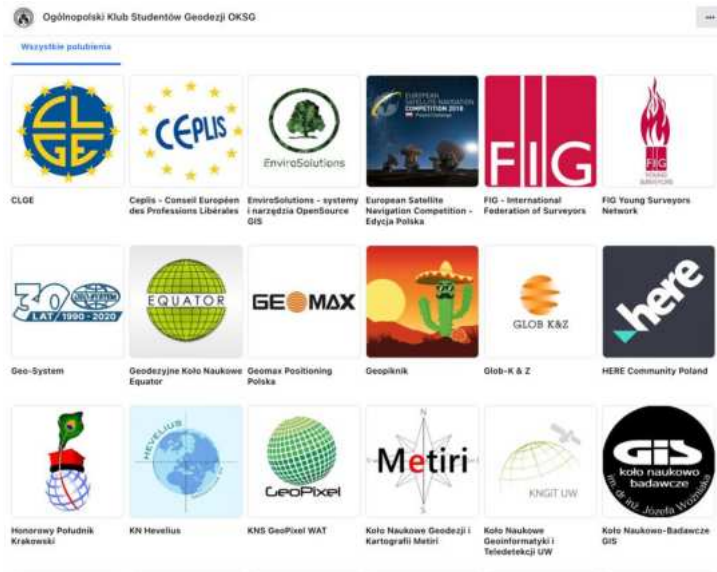


The Club's areas of interest:

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Organizational meeting with Professor Janusz Walo, President of the Association of Polish Surveyors



Conference statistics:

Over 90 students, participants, 14 scientific groups from 8 cities, 17 papers and 17 posters.

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Announce the 5th conference this year in Warsaw, year 2024 Military University of Technology:

XVIII Ogólnopolska Konferencja Studentów Geodezji, Warszawa, 18-19 kwietnia 2024 r.

Data publikacji: 27.09.2023 | Data wydarzenia: 18.04.2024

XVIII Ogólnopolska Konferencja Studentów Geodezji odbędzie się w dniach 18-19 kwietnia 2024r. w Wojskowej Akademii Technicznej w Warszawie, a jej organizatorami będą KNS „GeoPixel” oraz KNS Rozpoznanie Obrazowe z tej uczelni.



Support and mention of other initiatives that I will mention in other lectures and presentations.

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The symbol of the city of Wrocław - a dwarf surveyor.



7. Practical benefits, examples.

Two such cases of cooperation - students - army and students - local government of the Lower Silesian Voivodeship - appealed to me. I'll give them as an example.

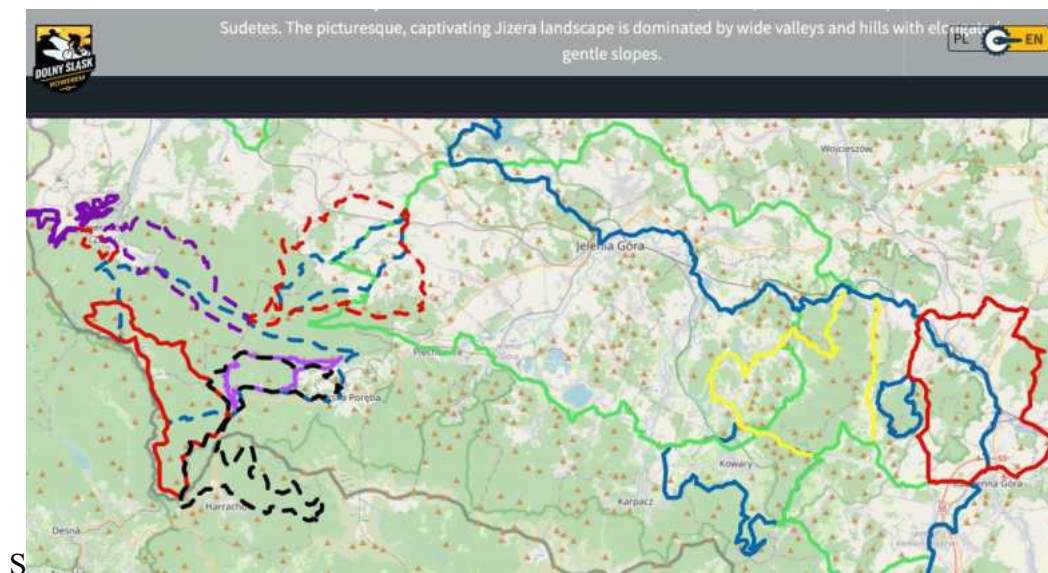
Students of the Military University of Technology (Military Academy) tested the detectability of special outdoor clothes in front of thermal imaging cameras. They showed the effect of working on various drone sensors (mix of technologies) as well as different terrain, weather conditions and tactical systems. The data they presented on maps, showing and proving by calculating coordinates, was directly used in practical applications by the army. They created recommendations and ways of moving in the field by calculating special algorithms.

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There were also two students who wrote an application enabling the design of routes through the mountains, profiled in terms of route inclination and calorie consumption. And there was nothing special about it if it weren't for the existing portal that didn't have this functionality. A great distinction for the team, and a nice, practical application made at a low cost for the voivodeship portal. The voivodeship's chief surveyor was pleased and surprised.



8. Summary.

It is worth supporting and promoting this type of initiatives. Nearly a hundred outstanding students from several universities. Caring about her education, wanting more than just finishing her studies. It is worth knowing them, helping them and showing how interesting our profession is. Participating in this conference is good because you can see how young people perceive this world. How much he is able to modernize it with his rebellious approach or understanding of the algorithm technology that commonly surrounds us. To unite them, communicate, organize financial support, show them the modern world that awaits them after graduating from university. It's worth it!

An additional value for these young people is the opportunity to present their own achievements in a practical, professional manner - directly and live, which is a unique experience. Confronting your point of view, a different point of view, with those around you

with a similar field of study - priceless! Presenting yourself to potential employers, and employers, e.g. in the case of Poland, are often mines - finding the best, leading students for work.

It takes work. Proceedings between universities, companies and student clubs. Conversations with people, involvement in these ideas, often in overcoming obstacles, working out organizational details. Yes. Requires. And how else can we show them our measuring piece of the world?

When I mentioned this initiative from “far away” country,

I was surprised that it did not exist in other countries.

And I'm happy that I can show something **MADE IN POLAND!**

I am extremely grateful to all those who support me in this endeavor - Thank you!