



ROMANIA  
MINISTRY OF EDUCATION AND RESEARCH  
"1 DECEMBRIE 1918" UNIVERSITY OF ALBA IULIA

# NATIONAL SCIENTIFIC SYMPOSIUM WITH INTERNATIONAL PARTICIPATION

8<sup>th</sup> – 9<sup>th</sup> of May 2026

# PROGRAM



**ALBA  
IULIA**  
**GeoCAD**  
**2026**



Land Surveyors  
Union of Romania



Alba Iulia  
City Hall



Alba County  
Council



International  
Federation  
of Surveyors



ÓE



Technical Faculty,  
Óbuda University



National Agency  
for Cadastre and  
Land Registry



Technical University of  
Civil Engineering Bucharest,  
The Faculty of Geodesy



Department of Natural  
Environment



Democritus University  
of Thrace - Department  
of Natural Environment



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Assoc.Prof.Dr.eng. Adrian SAVU, Romania  
Photogrammetry Senior Expert Pietro GRIMALDI, Italy





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Prof.Dr. Daniel BREAZ  
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Assoc.Prof.Dr.eng. Tudor BORȘAN  
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Eng. Mircea AFRĂSINEI  
Lect.Dr.eng. Silvia Alexandra DREGHICI  
Lect.Dr.eng. George Emanuel VOICU  
Lect.Dr.eng. Florina VOICU  
Asist. PhD.Stud.eng. Cosmina CIMPEAN  
PhD.Stud.eng. Iaroslav ZIFCEAC  
Marina Laura COCU





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## PROGRAM

NATIONAL SYMPOSIUM WITH INTERNATIONAL PARTICIPATION

# GeoCAD 2026

17<sup>th</sup> edition, Alba Iulia, May 8-9, 2026

### Friday, May 8, 2026

8:30 – 9:30	Participants registration	A9 Amphitheater Lobby
9:30 – 10:30	Opening of the GeoCAD 2026 Symposium	A9 Amphitheater
10:30 - 11:00	Coffee break	Building H, 1 <sup>st</sup> floor
	Opening the exhibition of specialized equipment	
11:00 - 13:00	Plenary session	A9 Amphitheater
13:00 - 14:00	Lunch	University Restaurant
14:00 - 17:00	Paper presentations by section	Building H
19:00 (Optional)	Apulum Guard Performance	Gate IV Esplanade of the Alba Iulia Citadel
19:30	Festive dinner	La Conac Restaurant

### Saturday, May 9, 2026

10:00 - 12:00	Workshop Young Surveyors <i>Early Career in Geodesy: Real Stories, Real Paths</i>	H1.4, Building H
10:00 - 12:00	UGR Round Table	Senate Hall, Apor Palace





Friday, May 8, 2026

**Plenary session – A9 Amphitheater**

**Moderators:**

Prof.Dr.habil.eng. Sorin HERBAN  
Prof.Dr. Levente DIMEN

11<sup>00</sup>-12<sup>00</sup>

**A MULTI-SCALE GEOSPATIAL ANALYSIS OF POPULATION STRUCTURE AND URBAN BEHAVIORS FROM NATIONAL TO POSTCODE LEVELS**

Ana Cornelia BADEA, Technical University of Civil Engineering Bucharest, Romania  
Gheorghe BADEA, Technical University of Civil Engineering Bucharest, Romania  
Anca Patricia GRĂDINARU, Technical University of Civil Engineering Bucharest, Romania  
Anca ENE, Technical University of Civil Engineering Bucharest, Romania

**ANALYSIS OF RMS AND A 25-POINT AVERAGE RMS (A-RMS) FOR GPS CARRIER PHASE SIGNAL UNDER VARIOUS CUTOFF ELEVATION ANGLES**

Sorin NISTOR, University of Oradea, Romania  
Norbert-Szabolcs SUBA, University of Oradea, Romania

**DEVELOPMENT OF A GIS FOR SLOPE STABILITY IN TAILINGS PITS BY INTEGRATING SMART SENSOR SYSTEMS INTO GEOSPATIAL SYSTEMS**

Remus DOBRA, „1 Decembrie 1918” University of Alba Iulia, Romania  
Terente CARAI, „1 Decembrie 1918” University of Alba Iulia, Romania  
Florin SAMOILA, „1 Decembrie 1918” University of Alba Iulia, Romania  
Levente DIMEN, „1 Decembrie 1918” University of Alba Iulia, Romania  
Mircea RISTEIU, „1 Decembrie 1918” University of Alba Iulia, Romania  
Alexandra DREGHICI, „1 Decembrie 1918” University of Alba Iulia, Romania





**Plenary session – A9 Amphitheater**

**Moderators:**

Assoc.Prof.Dr.eng. Magdolna Eva KONCSAG  
Eng. Mircea AFRÁSINEI

12<sup>00</sup>-13<sup>00</sup>

**LEICA TS20 ROBOTIC TOTAL STATION**

Mihai AVĂDANEI, Top Geocart S.R.L.

**SKYGRID – MODERN SOLUTIONS FOR HIGH-PRECISION SURVEYING MEASUREMENTS**

David PĂVĂLOAIA, S.C. Survey Topo Solutions S.A.

**GAUSS - PARTNER FOR THE DEVELOPMENT OF SURVEYING AND INFRASTRUCTURE PROJECTS**

Sorin COLHON, S.C. Gauss S.R.L.

**MODERN SOLUTIONS FOR PHOTOGRAMMETRY AND 3D SCANNING IN DIGITAL MAPPING**

Lucian BATRIN, S.C. Giscad S.R.L.





**Section A – H1.4, Building H**

**Moderators:**

Prof.Dr. Levente DIMEN  
 Assoc.Prof.Dr.eng. Tudor BORȘAN

14 <sup>00</sup> -17 <sup>00</sup>	<p><b>LAND USE DYNAMICS AND GEOLOGICAL FRAMEWORK IN THE LUPȘA ATU (ROMANIA): GIS ANALYSIS BASED ON CORINE LAND COVER DATA (1990–2018)</b>          Mihai AVADANEI, University of Petroșani, Romania; S.C. Top Geocart S.R.L.          Florina ȚÂRLE BURESCU, University of Petroșani, Romania          Bogdan POPOVICI, „Ștefan cel Mare” University of Suceava, Romania          Florin SALA, University of Life Sciences “King Mihai I” Timișoara, Romania          Mihai Valentin HERBEL, University of Petroșani, Romania; University of Life Sciences “King Mihai I” Timișoara, Romania</p> <p><b>IMPROVING DISCIPLINES IN THE GEODETIC ENGINEERING DOMAIN FROM THE PERSPECTIVE OF GEODESY 4.0 AND SURVEYOR 4.0</b>          Gheorghe BADEA, Technical University of Civil Engineering Bucharest, Romania          Ana Cornelia BADEA, Technical University of Civil Engineering Bucharest, Romania          Doina VASILCA, Technical University of Civil Engineering Bucharest, Romania          Dragoș BADEA, Technical University of Civil Engineering Bucharest, Romania          Anca ENE, Technical University of Civil Engineering Bucharest, Romania</p> <p><b>INTEGRATED GNSS, TERRESTRIAL NETWORK AND DEFORMATION ANALYSIS IN A SCIENTIFIC GEODETIC MONITORING PLATFORM</b>          Gabriel BĂDESCU, The University of Craiova, Romania          Cristian VASILE, The University of Craiova, Romania          Mihail SUSINSKI, The University of Craiova, Romania          Petre SĂVEȘCU, The University of Craiova, Romania          Gabriel TĂNASIE, The University of Craiova, Romania</p> <p><b>CLIMATIC FREEZE–THAW EXPOSURE AND THERMAL EXTREMES AS DRIVERS OF STRUCTURAL MONITORING NEEDS IN URBAN AREAS</b>          Lukasz Jan BEDNARZ, Wroclaw University of Science and Technology, Poland</p> <p><b>GNSS RTK AND RTX MULTI-CONSTELLATION DETERMINATIONS IN CRITICAL OBSTRUCTION SCENARIOS</b>          Maximilian DIAC, Technical University „Gheorghe Asachi” of Iasi, Romania          Loredana Mariana CRENGANIȘ, Technical University „Gheorghe Asachi” of Iasi, Romania          Anca-Alina LAZAR, Technical University „Gheorghe Asachi” of Iasi, Romania          Dan PĂDURE, Technical University „Gheorghe Asachi” of Iasi, Romania</p>
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14 <sup>00</sup> -17 <sup>00</sup>	<b>THE IMPACT OF THE CHANGES IN THE CURRICULUM IN STRENGTHENING THE STUDENTS COMPETENCES FROM THE FACULTY OF GEODESY BUCHAREST</b> Caius DIDULESCU, Technical University of Civil Engineering Bucharest, Romania Adrian SAVU, Technical University of Civil Engineering Bucharest, Romania Aurel Florentin Catalin NEGRILĂ, Technical University of Civil Engineering Bucharest, Romania Anca Patricia GRĂDINARU, Technical University of Civil Engineering Bucharest, Romania
	<b>TOPOGRAPHIC MEASUREMENTS FOR THE AXES SETTING OF THE LOAD-BEARING STRUCTURE FOR THE VERTICAL EXTENSION OF THE BUILDING REPRESENTED BY THE "MCM CENTER" COMMERCIAL COMPLEX (FORMER CENTRAL MARKET HALL)</b> Horațiu-Iulian HOGAȘ, Technical University „Gheorghe Asachi” of Iasi, Romania Cristian ONU, Technical University „Gheorghe Asachi” of Iasi, Romania Mihaela MACOVEI, Technical University „Gheorghe Asachi” of Iasi, Romania
	<b>BEYOND THE SURFACE: MULTISPECTRAL 3D PHOTOGRAMMETRY AS A TOOL FOR CULTURAL HERITAGE RESTORATION</b> Maria - Roberta JIANU, Politehnica University of Timișoara, Romania Flavius IOVAN, Politehnica University of Timișoara, Romania Andrei BARBAROS, Politehnica University of Timișoara, Romania
	<b>APPLICATION OF UAV-BASED SFM PHOTOGRAMMETRY FOR REMEDIATED LANDFILL DEVELOPMENT</b> Grzegorz PASTERNAK, Institute of Civil Engineering, Warsaw University of Life Sciences, Poland Anna PIĘTOCHA, Institute of Civil Engineering, Warsaw University of Life Sciences, Poland Alexandra DREGHICI, "1 Decembrie 1918" University of Alba Iulia, Faculty of Exact Sciences and Engineering, Romania Eugeniusz KODA, Institute of Civil Engineering, Warsaw University of Life Sciences, Poland
	<b>OPPORTUNITY ASSESSMENT: INTEGRATING REAL ESTATE APPRAISAL DATA INTO THE NATIONAL BUILDINGS REGISTER</b> Daniela RĂBOJ, Technical University of Civil Engineering Bucharest, Romania Gheorghe BADEA, Technical University of Civil Engineering Bucharest, Romania Ana-Cornelia BADEA, Technical University of Civil Engineering Bucharest, Romania Cezar Alexandru VLĂDUȚ, Technical University of Civil Engineering Bucharest, Romania Anca ENE, Technical University of Civil Engineering Bucharest, Romania





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14 <sup>00</sup> -17 <sup>00</sup>	<b>ECONOMIC SOLUTIONS IN UAV SURVEY PROCESS</b> Peter UDWARDY, Óbuda University - Alba Regia Faculty, Székesfehérvár, Hungary Jancso TAMAS, Óbuda University - Alba Regia Faculty, Székesfehérvár, Hungary
	<b>120 YEARS OF ECKERT MAP PROJECTIONS</b> Doina VASILCA, Technical University of Civil Engineering Bucharest, Romania Ana Cornelia BADEA, Technical University of Civil Engineering Bucharest, Romania





**Section B, Young Researchers – H0.4, Building H**

**Moderators:**

Lect.Dr.eng. Silvia Alexandra DREGHICI

Lect.Dr.eng. Florina VOICU

14<sup>00</sup>-17<sup>00</sup>

**ANALYSIS OF THE ENERGY PERFORMANCE OF A SINGLE-FAMILY HOME AND OPTIMISATION STRATEGIES FOR ACHIEVING THE NEARLY ZERO-ENERGY BUILDING (NZEB) STANDARD**

Florentina BREBAN, "1 Decembrie 1918" University of Alba Iulia, Romania  
Vasile VELȚAN, "1 Decembrie 1918" University of Alba Iulia, Romania  
Elena Izabella MARIN-LAZAR, "1 Decembrie 1918" University of Alba Iulia, Romania

**THE CONCEPT OF 3D CADASTRE AT THE GLOBAL LEVEL: A BIBLIOMETRIC ANALYSIS OF THE LITERATURE**

Cosmina Mariana CÎMPEAN, "1 Decembrie 1918" University of Alba Iulia, Romania  
Mihai Dorin ISAC, Technical University of Cluj-Napoca, Romania  
Daniela Lucia MANEA, Technical University of Cluj-Napoca, Romania

**MAPPING OF ANTHROPIZED AREAS GENERATED BY MINING ACTIVITIES BY INTEGRATING MULTI-SOURCE DATA: GIS, SATELLITE IMAGES AND UAV**

George Ionuț Răzvan FAZACAȘ, University of Petroșani, Romania  
Ioel Samuel VEREȘ, Technical University of Cluj-Napoca, Romania, European University of Technology, European Union  
Raluca Claudia GÂLGĂU, Technical University of Cluj-Napoca, Romania, European University of Technology, European Union

**ANALYSIS AND MONITORING OF MINING ACTIVITIES IN THE QUARRIES OF SĂLAJ COUNTY BY INTEGRATING THE COHERENCE OF INSAR SENTINEL-1 AND THE SENTINEL-2 SPECTRAL INDICES**

George Ionuț Răzvan FAZACAȘ, University of Petroșani, Romania  
Ioel Samuel VEREȘ, Technical University of Cluj-Napoca, Romania, European University of Technology, European Union  
Raluca Claudia GÂLGĂU, Technical University of Cluj-Napoca, Romania, European University of Technology, European Union

**A STUDY IN PHOTOGRAMMETRIC MODELING: A CASE STUDY OF THE UNION HALL IN ALBA IULIA**

Iulia MOGA, "1 Decembrie 1918" University of Alba Iulia, Romania  
Andreea BEGOV UNGUR, "1 Decembrie 1918" University of Alba Iulia, Romania  
Alexandra DREGHICI, "1 Decembrie 1918" University of Alba Iulia, Romania





14 <sup>00</sup> -17 <sup>00</sup>	<b>A COMPARISON OF CAD AND BIM TOOLS FOR GENERATING CONSTRUCTION PLANS</b> Ovidiu STAN, "1 Decembrie 1918" University of Alba Iulia, Romania Raul JIDVEIAN, "1 Decembrie 1918" University of Alba Iulia, Romania Alexandra DREGHICI, "1 Decembrie 1918" University of Alba Iulia, Romania
	<b>INTEGRATION AND AUTOMATION OF SPECIFIC TOPOGRAPHIC INFORMATION THROUGH THE GEOMATRIX APPLICATION IN THE CAD ENVIRONMENT</b> Ovidiu STAN, "1 Decembrie 1918" University of Alba Iulia, Romania George Emanuel VOICU, "1 Decembrie 1918" University of Alba Iulia, Romania
	<b>APPLYING ODDS OF ENERGY CADASTRE FOR RESILIENT URBAN ENVIRONMENT TO SHAPE HUMAN SUSTAINABILITY</b> Ildiko TULBURE, "1 Decembrie 1918" University of Alba Iulia, Romania Laurentiu MIHET, Alba Local Energy Agency - ALEA, Alba Iulia, Romania
	<b>EMPHASIZING JORDANIAN ENERGY SUPPLY ODDS BY SOLAR CADASTRE</b> Ildiko TULBURE, "1 Decembrie 1918" University of Alba Iulia, Romania Karam MOHAMMAD WALID AL QALAWI, Technical University of Cluj-Napoca, Romania





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**Saturday, May 9, 2026**

<b>H1.4, Building H</b>	
10:00	<b>Workshop Young Surveyors</b> <i>Early Career in Geodesy: Real Stories, Real Paths</i>

<b>Senate Hall, Apor Palace</b>	
10:00	<b>UGR Round Table</b>





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