



EMIL G. RACOVIȚĂ
Foundation for Science and Exploration Extreme Environments



UNIVERSITATEA BABEȘ-BOLYAI
BABEȘ-BOLYAI TUDOMÁNYEGYETEM
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„A ști sau a nu ști, aceasta e întrebarea”

THE TIMELESS SCIENCE AND EXPLORATION LEGACY OF EMIL G. RACOVIȚĂ

-Actualitatea patrimoniului științific și de explorare a lui Emil G. Racoviță-

Fundația pentru Știință și Explorare Medii Extreme - Emil G. Racoviță organizează în data de 17 noiembrie 2022, începând cu ora 15.00, evenimentul „The Timeless Science and Exploration Legacy of Emil G. Racoviță”.

Evenimentul este accesibil ONLINE:

<https://www.racoviță-foundation.ro/2022/11/17/timeless-ro.html>

Evenimentul este organizat sub egida Universității Babeș-Bolyai din Cluj Napoca și a Academiei Române și are invitați de marcă în domeniile explorărilor antarctice, biologiei marine, biospeologiei, speologiei, astrobiologiei, care vor face prezentări inedite în contextul plurivalenței moștenirii lăsate de savantul Emil G. Racoviță.

Emil G. Racoviță s-a născut la Iași pe 15 noiembrie 1868. Renumele său mondial este legat de explorarea Sudului polar, fondarea biospeologiei, înființarea primului institut de speologie din lume, studiul evoluției speciilor, precum și aducerea științei și cunoașterii către oameni (https://www.racoviță-foundation.ro/ro/EmilRacovita_bio.html)

A fost unul din fondatorii învățământului modern din România participând din 1920 la dezvoltarea Universității din Cluj de pe pozițiile de cercetător, profesor și rector.

Membru și președinte al Academiei Române, de pe poziția unuia dintre cei mai de seamă biologi ai României, Emil G. Racoviță a elaborat o teorie proprie a evoluției lumii vii subliniind influența majoră pe care mediul artificial al omului îl joacă în declanșarea crizelor ecologice.

Personalitatea lui Emil Racoviță este o sursă de inspirație pentru atragerea tinerilor spre zona de cercetare și de știință, pentru colaborarea internațională, revigorarea expedițiilor științifice și explorarea mediilor extreme și necunoscute.

Este remarcabil „testamentul” lui Emil G. Racoviță prin care lasă „averea culeasă timp de patruzeci de ani prin nouă țări și nouă mări, de la atâtea vietăți ce am căutat, urmărit și cercetat cu dor și drag, de acea adunată din mii de cărți și mii de întâmplări auzite sau trăite, avere numai în foarte mică parte pusă în slove. Această avere aș vrea eu, care n-am fost altceva în viața mea decât student și profesor, adică numai un universitar, și care nici nu vreau să fiu altăceva, aș vrea, zic, s-o las moștenire băieților și fetelor patriei noastre. Nu-i te miri ce bogăție, dar mie în viață mi-a priit bine și de aceea le-o ofer cu încredere, în inventarul următor:

- Iubire de patrie și de grai românesc.
- Dragoste de Știință.
- Încredere desăvârșită în metodele științifice.
- Curaj civic de a spune adevărul totdeauna și în orice loc.
- În sfârșit, optimism netulburat izvorât din credința că la urma urmei tot n-o fi omenirea de azi așa de proastă, ca să-și sape singură groapa”.

A trecut în neființă pe data de 19 noiembrie 1947, fiind înmormântat cu funeralii naționale organizate de Universitatea din Cluj, în spiritul propriului discurs evoluționist: “Pe scara fără sfârșit a vremurilor, încet-încet trudește omenirea, când trasă în jos spre întuneric de superstițiile ignoranței, când trasă în sus spre lumină de adevărurile științei... A ști sau a nu ști, aceasta e întrebarea!

Căci a nu ști înseamnă: superstiții, egoism orb, concurență sălbatecă, neînțelegere, dușmănire, război, foamete, prăpăd.

A ști înseamnă pentru omenire: organizare temeinică, activitate rațională, cooperatism, solidaritate, evoluție pașnică.

A ști înseamnă pentru om: a-și trăi timpul de a fi cu mulțumire și a aștepta clipa de a nu fi cu seninătate.”

Organizatorul evenimentului, *Fundația pentru Știință și Explorare Medii Extreme - Emil G. Racoviță* (www.racovitza-foundation.ro) a fost înființată sub egida Universității Babeș-Bolyai din Cluj-Napoca (UBB) conferită de Consiliul de Administrație al acesteia „ca omagiu adus lui Emil G. Racoviță, pentru a întări și dezvolta poziționarea academică internațională a savantului și a domeniului fondat de acesta” și a primit egida Academiei Române conferită prin hotărârea Prezidiului Academiei.

Fundatia a fost constituită de un grup de oameni de știință din țară și din străinătate, exploratori și pasionați de natură, alături de familia savantului Emil G. Racoviță:

Călin Cașcaval, Oana Marcu, Dana Racoviță, Dan Hazaparu, Viorel Lascu, Ioana Meleg, Bogdan Onac, Octavian Popescu, Simion Simon, Cristian Lascu.

Misiunea Fundației este de a dezvolta o rețea de colaborare de excelență pe domeniile cercetării de frontieră în medii naturale, dezvoltarea rețelei Racoviță bazată pe spiritul și conceptele savantului și conectarea acesteia la rețelele internaționale pentru a contribui la creșterea performanțelor României în sprijinul evoluției pozitive a umanității.

Evenimentul promovează misiunea și obiectivele Academiei Române de a realiza programe de valoare pentru cultura și știința românească și de a contribui la păstrarea și valorizarea patrimoniului științific, educațional și cultural al României.

Chiar dacă evenimentul este susținut de cercetători de marcă el se adresează prin conținut, în egală măsură, liceenilor, adolescenților, studenților, cercetătorilor, profesorilor de liceu și universitarilor, cercetătorilor, mediului academic, publicului doritor de cunoașterea și protejarea naturii, doritorilor de explorări extreme ce țin de lumea peșterilor, a ghețarilor, de mediul marin sau universul cosmic.

Este o invitație adresată jurnaliștilor pentru a face cunoscute valorile lăsate de Emil G. Racoviță poporului român și lumii.

Acad. Octavian Popescu, Președinte al **Fundației pentru Știință și Explorare Medii Extreme - Emil G. Racoviță**

e-mail: opopescu.ubbcluj@gmail.com

Tel:0749144454

Atașat Programul evenimentului și scurte prezentări despre prezentatori și organizațiile implicate



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THE TIMELESS SCIENCE AND EXPLORATION LEGACY OF EMIL G. RACOVIȚĂ

Babeș-Bolyai University, Cluj-Napoca, Romania

November 17, 2022, 15:00 – 18:15 EET

ONLINE EVENT

<https://www.racovitza-foundation.ro/2022/11/17/timeless-ro.html>

OPENING REMARKS (15:00)

Acad. Ioan-Aurel Pop (President, Romanian Academy)

Prof. Daniel David (Rector, Babeș-Bolyai University; Corresponding Member of the Romanian Academy)

Acad. Octavian Popescu (President, E.G. Racoviță Foundation)

BELGICA'S LEGACY (15:15)

Acad. Emeritus Patrick De Deckker (Australian National University, Canberra; Australian Academy of Sciences)

On the extraordinary achievements by the biologist Emil Racoviță during and after the Belgica expedition

Anders Bache (The Roald Amundsen House, Norway)

Roald Amundsen's House and the Belgica expedition

Carol Smith (Executive Director, Frederick A. Cook Society, New York, USA)

Frederick Cook reimaged

Olivier de Schrevel and Charlotte Rolin Jacquemyns (Georges Lecoq Family, Belgium)

The Belgica expedition: some highlights of Emile Racovitza

Julian Sancton (book author)

"Madhouse at the End of the Earth" – live Q&A with author

Prof. Peter Convey (British Antarctic Survey, NERC, UK) & Dr. Iryna Kozheretska (Natl.

Antarctic Sci. Center of Ukraine)

Belgica antarctica – the Antarctic continent's only true insect

MARINE BIOLOGY, BIOSPELEOLOGY, SPELEOLOGY, AND BEYOND (17:00)

Prof. Angel Ginés (University of Balearic Islands, Mallorca)

Coves del Drac and the beginnings of biospeleology

Prof. David Culver (American University, Washington, USA)

E.G. Racoviță, the father of biospeleology

Prof. Bogdan P. Onac (University of South Florida, USA & E.G. Racoviță Institute of Babeș-Bolyai University, Cluj-Napoca, Romania)

Speleology: A look into its past and future

Dr. Penelope Boston (NASA Astrobiology Institute, USA)

Alien worlds beneath our feet

CLOSING REMARKS (18:00)

Dr. Călin Cașcaval (Co-founder, E.G. Racoviță Foundation, and great grandson of Emil G. Racoviță)

E.G. Racoviță Foundation – Opportunities for new generations

Prezentatorii:

Acad. Prof Emeritus Patrick De Deckker (Australian National University, Canberra; Australian Academy of Sciences)

<https://researchers.anu.edu.au/researchers/de-deckker-p>,

On the extraordinary achievements by the biologist Emil Racoviță during and after the Belgica expedition

Patrick De Deckker, Belgian by birth and Australian by naturalisation, is one of Australia's most distinguished Earth scientists. He spent most of his career at the Australian National University in Canberra including time as Head of the former Department of Geology, contributing to Australian and international Earth Science in the multidisciplinary fields of Micropalaeontology and the chemical composition of microfossils, Limnology especially of salt lakes, Aeolian Dust and Airborne Deposits and in Palaeoceanography. His aim has been to obtain information of relevance for the reconstruction of past marine and continental environments of importance for the understanding of global and regional climatic variability.

He holds the Verco Medal, Royal Society of South Australia, 1992; Australian Society for Limnology Medal, 2005; Order of Australia Medal, 2007; Christoffel Plantin Medal, 2008; Mawson Medal of Australian Academy of Sciences, 2010. Patrick became a Fellow of the Australian Academy of Science in 2012; Honorary Fellow of the Geological Society of London in 2014; Officer of the Order of Leopold II, Belgium 2018; and was awarded the Brady Medal by The Micropalaeontological Society in 2019.

Anders Bache (The Roald Amundsen House, Norway). <https://amundsen.mia.no/>

Roald Amundsen's House and the Belgica expedition

Originally an archaeologist with a focus on historical sites in the polar region, In the recent years Anders Bache has led the research and digitization at Roald Amundsen's House, which have included a full digital version of the house and collection, several podcasts, books, lectures and articles.

Carol Smith (Executive Director, Frederick A. Cook Society, New York, USA). <https://frederickcookpolar.org/>

Frederick Cook reimagined

The origins of the Frederick Cook Society date back to 1940, and Dr. Cook's friend and fellow explorer, Ralph Shainwald-von Ahlefeldt. The original purpose of the Society was to defend Dr. Cook's claim to the North Pole. The current mission is to promote his life's work as explorer, ethnographer, writer, physician and photographer.

Olivier de Schrevel and Charlotte Rolin Jacquemyns (Georges Lecointe Family, Belgium)

The Belgica expedition: some highlights of Emile Racovitza

[TBD: awaiting the bio. Charlotte is the great grand daughter of Georges Lecointe, Belgica's Captain. She and her husband Olivier de Schrevel live in Belgium, and have worked with scientists and historians to provide access to Capt. Lecointe's documents and diaries].

Julian Sancton (book author)

"Madhouse at the End of the Earth" – live Q&A with author

Julian Sancton is a senior features editor at The Hollywood Reporter. His writing has appeared in Vanity Fair, Esquire, GQ, The New Yorker, Departures, and Playboy, among other publications. He has reported from every continent, including Antarctica, which he visited while researching his first book, *Madhouse at the End of the Earth*. He lives in Larchmont, New York, with his partner, Jessica, and their two daughters.

Prof. Peter Convey (British Antarctic Survey, NERC, UK) & Dr. Iryna Kozeretska (Natl. Antarctic Sci. Center of Ukraine) <https://www.bas.ac.uk/profile/pcon/>

Belgica antarctica – the Antarctic continent's only true insect

Peter Convey is a terrestrial ecologist with over 34 years experience of working with the British Antarctic Survey and in a wide range of polar environments (19 Antarctic summers and one winter, multiple Arctic (Svalbard, Greenland, Russia) field or teaching periods). He has broad and diverse research interests, with over 520 publications.

He is an 'Individual Merit' (IMP) senior research scientist (NERC Band 3) at BAS, where he is deputy leader of the core 'Biodiversity, Evolution and Adaptation' Team, as well as being a member of the BAS Science Management Team, where he has responsibility for international interactions. He is very active in the development of national and international Antarctic science priorities and collaborative research programmes, in particular through the Scientific Committee on Antarctic Research (SCAR). He was Co-Chair of the SCAR Science Research Programme 'Evolution and Biodiversity in Antarctica' (2006-2013), and previously a founding member and steering committee member of the 'Regional Sensitivity to Climate Change in Antarctica' research programme. Until recently, he chaired the SCAR Development Council and was Deputy Co-Chair of the SCAR research programme 'State of the Antarctic Ecosystem'. He is a member of the SCAR Advisory Group on Antarctic Climate Change and the Environment. In the UK, he has been a member of the National Committee on Antarctic Research since 2005, and of All Party Parliamentary Groups - on Biodiversity 2010-2015, and The Polar Regions 2016 to present.

Peter Convey has been an Honorary Lecturer at the University of Birmingham since 2000, a regular Guest Lecturer at UNIS, Svalbard, and a Visiting Professor at the National Antarctic Research Centre, University of Malaya, Malaysia (2010-2017). He was awarded an Erskine Fellowship to work at Gateway Antarctica (New Zealand) in 2013/14. In 2020 he was elected to a prestigious Distinguished Visiting Professorship of Polar Biology at the University of

Johannesburg, South Africa. He has supervised 30 (completed) PhD students and has 10 current PhD and Master's students, and is a STEM Ambassador. He has been an examiner for 26 PhD and 5 Master's theses. Awarded the United Kingdom Polar Medal in 2007, Pete's professional standing is further recognised by Fellowship of the Society for Biology and Chartered Biologist status, and Fellowship of the Royal Entomological Society and Cambridge Philosophical Society.

Prof. Angel Ginés (University of Balearic Islands, Palma de Mallorca, Spain)

<https://www.researchgate.net/scientific-contributions/Angel-Gines-21621457>

Coves del Drac and the beginnings of biospeleology

Dr. Angel Ginés is a biologist and an avid caver who has conducted cave and karst research particularly in the Balearic Islands for the past 50 years. His main research interest has been focused on surface karst landforms, particularly *karren* features, as well as geochronological investigations on deposits from coastal caves and their relationships with ancient sea levels. He has (co)-edited five books and published over 100 papers on biospeleology, speleogenesis, CO₂ in cave atmosphere, karst morphology, and history of cave research and exploration in the Balearic Islands.

Professor Emeritus David Culver (American University, Washington, USA)

<https://www.american.edu/cas/faculty/dculver.cfm>

E.G. Racoviță, the father of biospeleology

David C. Culver received his PhD at Yale University. He is the author or editor of six books and over 100 articles, he has studied many aspects of the biology of subterranean animals, especially cave animals. Another area of interest is the distribution of hotspots of subterranean biodiversity world-wide. He is also studying the fauna of superficial subterranean habitats, such as seeps, that have many of the morphological features of cave animals, such as eyelessness and loss of pigment. His most recent book, written with Tanja Pipan (Institute of Speleology in Postojna, Slovenia), is *Biology of caves and other subterranean habitats*, published by Oxford University Press. Prof. Culver is a Fellow of the American Association for the Advancement of Science.

Prof. Bogdan P. Onac (University of South Florida, USA & Babes-Bolyai University, Romania)

<https://www.usf.edu/arts-sciences/departments/geosciences/people/faculty/petroniu-bogdan-onac.aspx>

Speleology: A look into its past and future

Bogdan P. Onac's research interests center on reconstructing climate and paleoenvironmental changes using speleothems, ice, and guano from various cave and karst deposits. He employs mineralogy, stable and radiogenic isotope geochemistry to answer his research

questions. Onac's publishing record includes over 150 articles and 12 books. A particular aspect of his current and future studies is to contribute data on past sea level positions for both warmer and colder periods of Earth's history using carbonate encrustations from littoral caves. He is currently Professor of Karst Geology and Paleoclimate in the School of Geosciences at the University of South Florida, USA and Adjunct Research Professor at the Babes-Bolyai University in Cluj-Napoca, Romania.

Dr. Penelope Boston (NASA Astrobiology Institute, USA)

<https://astrobiology.nasa.gov/nai/directory/boston-penelope/>

Alien worlds beneath our feet

Dr. Penny Boston holds a PhD from the University of Colorado, Boulder and is the Director of NASA's Astrobiology Institute for which she is fulfilling its mission to perform, support, and catalyze collaborative interdisciplinary astrobiology research. She is also responsible for training the next generation of astrobiologists, providing scientific and technical leadership for astrobiology space mission investigations, and developing new information technology approaches for collaborations among widely distributed investigators. Prior to joining NASA, Dr. Boston was Professor and Chair of the Earth and Environmental Sciences Department at the New Mexico Tech University and the Associate Director of the National Cave and Karst Institute in Carlsbad, New Mexico.

Dr. Călin Cașcaval (Director of Engineering, Google Research)

<https://www.linkedin.com/in/cascaval>

Opportunities for New Generations

Dr. Călin Cașcaval is Director of Engineering at Google Research and as one of the scientist's great grandsons, a co-founder of the Emil G. Racoviță Foundation For Science and Exploration in Extreme Environments. He is an experienced technical executive with strategic vision and proven team building, research and product delivery of computer systems. He identified industry trends, defined, built, and delivered first of a kind prototypes and products, including: the first programmable networking (P4) production compiler and networking stack (at Barefoot Networks), the first mobile heterogeneous computing runtime and parallel browser, mobile optimized math libraries and power optimization framework (at Qualcomm Research), system software for the Blue Gene family of supercomputers and the first UPC compiler to scale to hundreds of thousands of processors (at the IBM TJ Watson Research Center). Călin has over 50 peer-reviewed publications, 38 awarded patents. He is an IEEE Fellow and an ACM Senior Member.

Moderators:

Dr. Oana Marcu (Co-Founder, Emil G. Racoviță Foundation)

Oana Marcu is a biologist with 30 years in research, teaching, mentoring and management in

the fields of developmental and molecular biology, and space science and technology. She taught academic courses in Developmental Biology, and worked at the SETI Institute and NASA Ames Research Center in California, USA as payload scientist for an immunity experiment on the Discovery Shuttle (STS-121 in 2016), for small satellite life sciences missions in collaboration with the German Space Agency, projects for the International Space Station (ISS) and at the Stanford Linear Accelerator Center; she acted as lead scientist and international liaison for a NASA initiative to build the world's first open science repository of all biological data and metadata from the ISS, and was part of the team for the first PCR facility in microgravity on the ISS. She is the recipient of 7 NASA individual and team Honor Awards. Even though she held astrobiology grants to look for life on other planets, she is very down-to-earth and in her private practice she uses an epigenetics approach to facilitate for her clients new opportunities for personal and professional health, leadership and success.

Dr. Ioana-Nicoleta Meleg (Co-Founder, Emil G. Racoviță Foundation)

Ioana-Nicoleta Meleg is an ecologist and speleologist. Her current work focuses on inferring past population dynamics by combining ancient DNA research with palaeoecological studies. In recognition of her scientific work, she was awarded prestigious fellowships financed by the Alexander von Humboldt Foundation and the Marie Skłodowska-Curie Actions of the European Union. She is one of the co-founders of the Emil G. Racoviță Institute for Study of Life in Extreme Environments at the Babeș-Bolyai University in Cluj-Napoca, Romania, where she currently holds a Senior Researcher position. The overarching aim of Ioana's professional and private life is to promote ecology, the science that helps us to better understand the environment and to increase our sense of stewardship for the Earth.

Fondatorii Fundației pentru Știință și Explorare Medii Extreme - Emil G. Racoviță

Călin Cașcaval- cercetător în livrare de produse și sisteme informatice, strănepot al lui Emil G. Racoviță

Oana Marcu – biolog, cercetător în biologie moleculară, știință și tehnologie spațială, strănepoată a lui Emil G. Racoviță

Dana Racoviță – farmacist, strănepoată a lui Emil G. Racoviță

Dan Hazaparu – speolog, inginer, cercetător și expert în politici publice și dezvoltare de resurse

Viorel Lascu - speolog, explorator, inginer, expert în dezvoltare durabilă și managementul biodiversității

Ioana Meleg – speolog, ecolog, biolog, cercetător în paleogenomică

Bogdan Onac – speolog, geolog, cercetător în climă și paleomediul, profesor universitar

Octavian Popescu – biolog, academician, specialist în biologie moleculară, biochimie, genetică și microbiologie

Simion Simon – profesor, cercetător în știința materialelor și rezonanță magnetică

Cristian Lascu – speolog, geolog, jurnalist, explorator