International Union of Geodesy and Geophysics



# Commission on Mathematical Geophysics

# Call for nominations: The 2024 Vladimir Keilis-Borok Medal

### Scope

The Vladimir Keilis-Borok Medal of the IUGG Commission on Mathematical Geophysics (CMG), established by the IUGG Bureau in May 2021, recognizes middle career scientists who made important contributions to the field of mathematical geophysics. The aim of the Medal is to honor the legacy of Keilis-Borok – a visionary science leader and organizer, prolific seismologist and mathematical geophysicist, the CMG founder, and former IUGG President – in promoting transformative scientific advancement and selfless leadership.

### Award presentation

The Medal will be presented at the 34<sup>th</sup> IUGG Conference on Mathematical Geophysics to be held in the Indian Institute of Technology Bombay, Mumbai, India, June 2-7, 2024. The awardee will be invited to deliver the Keilis-Borok Medal Lecture.

# Eligibility

A scientist, 10 to 20 years of active research after completing a PhD or full-time equivalent working, is eligible to be nominated for the medal. The members of the medal committee and the officers of the CMG (during their terms in office) are not eligible to be nominated.

#### Nomination

The nomination deadline is **January 15, 2024**. Nominations are accepted from any member of the science community. Self-nominations are not accepted. The members of the medal committee cannot nominate candidates.

#### Format of nomination

A nomination should include:

• **Nomination letter (max 2 pages).** The nomination letter, preferably on the nominator's letterhead, must include the nominator's name, position, affiliation, and contacts. The nomination letter must clearly explain why the nominee deserves the recognition. This should include the nominee's scientific contributions to mathematical geophysics, broader impact on the discipline, and their leadership role. The nomination letter might refer to the candidate's publications as listed in the selected bibliography.

• Curriculum Vitae (max 2 pages). The curriculum vitae must include nominee's name, contact information, degrees, history of employment, and main research, service, and leadership contribution.

• Selected bibliography (max 2 pages). A list of selected publications by the candidate that best support the nomination. It must also summarize the candidate's total number and types of publications.

• **References.** Each nomination must include names and contact information of 3 experts, who can provide references about the nominee at the medal committee's request. The experts might be contacted by the medal committee to give their opinion on the nominee's contributions. No recommendation letters are required, although a nomination may include no more than 3 letters of support (maximum 1 page each). These letters should clearly establish the nominee's recognized contribution to the field. The medal committee members cannot serve as referees to the nominees. Letters from the medal committee members are not accepted.

The nomination materials must use Times New Roman 12pt, Arial 11pt, Calibri 11pt, or comparable fonts. The total nomination package must be no more than 10 pages. Only complete and properly formatted packages will be forwarded for review.

A single PDF file with the nomination materials should be sent to: <u>andrew.valentine@durham.ac.uk</u>

#### **Medal Committee**

Enamundram Chandrasekhar, Indian Institute of Technology Bombay, Mumbai, India Alik Ismail-Zadeh, Karlsruhe Institute of Technology, Germany (Chair) Elisa Mantelli, University of Munich, Germany (TBC) Leslie M. Smith, University of Wisconsin – Madison, USA Andrew Valentine, Durham University, UK

### Vladimir I. Keilis-Borok, IUGG President (1987–1991), CMG Founder



Vladimir (Volodya) Keilis-Borok was one of the most influential mathematical geophysicists of the last century. He was born in Moscow in 1921, graduated from the Moscow State Geological Prospecting University in 1943, and received his PhD (1948) and DSc (Habilitation, 1953) in mathematics and geophysics from the USSR Academy of Sciences in Moscow. He worked at the Academy's Institute of Physics of the Earth (1948–1989) and chaired the Department of Computational Seismology of the Institute. In 1989, he founded the Institute of Earthquake Prediction Theory and Mathematical Geophysics at the Academy and was its inaugural Director. In 1999, he moved to California, USA to take a position of Regent's Professor and then Distinguished Professor at UCLA, the University where Volodya worked until his death in 2013.

Keilis-Borok was the founder of the IUGG International Committee for Geophysical Theory and Computers (1964–1979, now CMG), and served IUGG as a Bureau Member (1983–1987) and IASPEI Vice President (1983–1987). He was elected Ordinary Member of the Executive Board (1988–1991) of the International Council for Scientific Unions (ICSU, now the International Science Council). Keilis-Borok was an elected member of several science academies and societies, including the American Academy of Arts and Sciences (1969), the Russian Academy of Sciences (1988), the Royal Astronomical Society (1989), the U.S. National Academy Sciences (1971), the Austrian Academy of Sciences (1992), the Pontifical Academy of Sciences (1994), and the Academia Europaea (1999). He was awarded the inaugural Lewis Fry Richardson Medal by the European Geophysical Society for his exceptional contributions to nonlinear geophysics and was elected Doctor Honoris Causa of the Institut de Physique du Globe de Paris, France.

# 2022 Vladimir Keilis-Borok Medalist

The inaugural medal was bestowed on Dr. Frederik J. Simons, Professor of the Princeton University (USA) for his "outstanding contributions to mathematical geophysics and development of cutting-edge mathematical methods in geoscience data analysis".