

---

## Prof. Yan Lavallée

**B.Sc. (Hons), M.Sc., Dr. Rer. Nat., MAE, FAGU**

---

Department of Earth and Environmental Sciences, Ludwig-Maximilians Universität (LMU-Munich), Germany

---

**Born** on 12 October 1978, in St-Jérôme, Québec, Canada

**Languages:** French, English, German, Spanish

---

### Education

2004 - 2008 · **Doctor Rerum Naturalium in Mineralogy/ Volcanology**, LMU-Munich, Germany

2002 - 2003 · **Master of Science in Space Studies**, University of North Dakota, USA

1998 - 2001 · **Bachelor of Science (Honours) in Earth and Planetary Sciences**, McGill University, Canada

---

### Positions current

Since 2025 · **Co-Director of Munich Centre for Geoastronomy** (being established), LMU-Munich, Germany

Since 2024 · **Director of Department for Earth and Environmental Sciences**, LMU-Munich, Germany

Since 2023 · **Senior Scientific Advisor**, Magma Power, USA

Since 2022 · **Chair of Magmatic Petrology and Volcanology**, LMU-Munich, Germany

---

### Positions past (since 2000)

2024 - 2026 · **Chair of Science and Technology Board**, Krafla Magma Testbed (KMT)

2012 - 2022 · **Chair of Volcanology & Magmatic Processes**, University of Liverpool, UK

· **Member of the Institute for Risk and Uncertainty**, University of Liverpool, UK

2016 · **Associate Professor**, Michigan Technological University, USA

2012 · **Guest Professor of Volcanology**, University of Strasbourg, France

2008 - 2012 · **Assistant Professor in Volcanology**, Ludwig-Maximilians University

2004 - 2008 · **Experimental volcanologist**, Ludwig-Maximilians University

2002 - 2004 · **Geologist**, University of North Dakota

2001 · **Geologist**, McGill University

2000 · **Geologist**, Geological Survey of Canada

---

### Honours (selected)

2019 - 2021 · Leverhulme Research Fellow

2018 · Elected member of the *Academia Europaea* (MAE)

2017 · Fellow of the American Geophysical Union (FAGU)

2017 · **Wager Medal** of the International Association of Volcanology and Chemistry of the Earth's Interior

2017 · **James B. Macelwane Medal** of the American Geophysical Union (AGU)

2016 - 2020 · Elected Chair of Physical Sciences and Engineering on the Board of the Young Academy of Europe (YAE)

2016 · **Thermo-Fischer Award** of the Volcanology and Magmatic Study Group (VMSG)

2014 · Elected Fellow of the Young Academy of Europe (FYAE)

2009 · Top 10 finalists to the Deutscher Studienpreis for best PhD in science and engineering in Germany

2009 · Leopold Gélinas Gold Medal for best PhD in volcanology and igneous petrology in Canada

---

### Scientific Output

161 Peer-reviewed articles, 2 seismic datasets, ~7,700 citations, H-index 52 (i10-index: 110)

>60 invited presentations, including the following high-level events:

- “Accessing Magma: A necessary Revolution in Earth Sciences and Renewable Energy” at the 2023 annual general meeting of the Academia Europaea (AE)
  - Strain Localisation in Magma: Testing new frontiers in volcanology and geothermal research” at 2016 Euro-Science Open Forum (ESOF) Meeting, UK. Invited by the European Research Council.
  - “Terre et Verre” at the closing ceremony of the 2022 UN International *Year of Glass* event, Paris, France
- 

### Funding history and scientific coordination

Principal Investigator (PI) on 35 grants totalling >70,000,000 €, including:

- 2026-2033 Principal Investigator and coordinator of Geoastronomy Connector, Deutsche Forschungsgemeinschaft (DFG) Excellence cluster on “ORIGINS: From the Origin of the Universe to the First Building Blocks of Life” (53.2 M€)
- 2026-2030 Co-Investigator Horizon Europe RIA (European Commission) grant on “SuperHot geothermal – Integrated demonstration and Flow Testing (SHiFT). (10 M€ of 24 M€ project)

- 2024-2027. Principal Investigator and coordinator, Deutsche Forschungsgemeinschaft (DFG) Research grant on “Rapid scrubbing of SO<sub>2</sub> during explosive volcanic eruptions” (360 k€)
- 2021-2027. Principal Investigator and coordinator, H2020 European Research Council (ERC) Consolidator Grant on “Magma outgassing during eruptions and geothermal exploration (MODERATE)” (2.8 M€)
- 2021-2030. Principal Investigator and coordinator, International Continental Drilling Program (ICDP), “Drilling into Krafla Magma – Krafla Magma Testbed (KMT)”, (\$1.5M)
- 2012-2018. Principal Investigator and coordinator, FP7 European Research Council (ERC) Starting Grant on “Strain Localisation in Magma (SLiM)” (1.9 M€)

---

### Research Supervisions

I currently mentor 9 post-docs (3F, 7M) and (co-) supervise 5 PhD students (3F, 2M)

I previously mentored 11 Post docs (6F, 5M), and (co-) supervised 20 PhDs (7F, 13M) & several MSc/BSc students

---

### Commission of Trust

- Since 2024 · Member of *Sensibilisation Commission* for the Faculty of Geosciences, LMU-Munich
  - 2023 · Founding member of *Krafla Magma Testbed (KMT)* non-profit organisation (NPO)
  - Since 2023 · Member of evaluation committee for Tenure, LMU-Munich
  - 2019-2026 · Member of External Admin. Council of the *Institut de Physique du Globe de Paris* (IPGP), France
  - 2019 · Founding member of Young Academy of Europe Charity Organisation
  - 2018-2020 · Awarding Committee for the Joanne Simpson Medal of the American Geophysical Union (AGU)
  - 2017-2020 · Awarding Committee for the André Mischke Prize of the Young Academy of Europe (YAE)
  - Since 2014 · Science Committee of Krafla Magma Testbed (KMT)
  - Since 2012 · Examiner of 17 PhD viva
- 

### Organisation of Conferences and Workshops

- 2024 · Silicate Melt Workshop, Munich, Germany
  - 2024 · Chair of “*Krafla Magma Testbed (KMT) Symposium: together towards a greener and safer future*”, Munich, Germany
  - 2018, 2019 · Joint Annual Meeting of Academia Europaea and YAE, Barcelona, Spain: ~300 delegates/ year
  - 2017 · Joint Annual Meeting of Academia Europaea, ALLEA and YAE, Budapest, Hungary: ~300 delegates
  - 2017 · Short course in experimental volcanology, University of Liverpool, UK: 20 delegates
  - 2017 · Chair of 2017 Joint Assembly of the Volcanology and Magmatic Study Group (VMSG), Tectonic Study Group (TSG) and British Geophysical Association (BGA), Liverpool, UK: ~450 delegates
  - 2016 · Workshop on Volcanoes (WoV), Santiaguito volcano, Guatemala: 69 delegates
  - 2016 · 11th EURO-conference on Rock Physics and Geomechanics, Ambleside, UK: 85 delegates
- 

### Editorial and Societal Activity

- 2022 · Mentor early career scientists applying for ERC grants (coordinated by Polish Academy of Science)
  - 2019 · Content Editor for Blizzard Road Production (ep. *The Giant’s Causeway; Basalt Column of Iceland; Geysers*)
  - 2011 · Topical issue editor “Volcanic Ash: An agent in Earth Systems” in *Chemistry and Physics of the Earth*
  - Since 2005 · I have also (co-) convened more than 25 thematic sessions at international conferences.
- 

### Public Outreach (Selected)

- 2026 · Present on “Taming volcanoes? (*Vulkane zähmen?*)” at the German Museum of Science (>1,200 views)
  - 2019 · Present “New frontiers in volcanology and energy resources: The advent of large-scale magma experiments” at the Herdman symposium, open to the public (~250 attendants), Liverpool, UK
  - 2018 · Panel discussion on “Materiality” at Matter of Stuff art gallery (~150 attendants), London, UK
  - 2016 · Royal Society Science Summer Exhibition. Exhibition on “Visible Science: bringing science to life via 4D synchrotron x-ray tomography” in London and Manchester (~20,000 visitors)
  - 2002-2004 · Content editor for VolcanoWorld – then, the largest online scientific website
- 

### Media Coverage

My work has been publicised in *Nature*, *3Sat*, *The Guardian*, *AGU TV*, *ProSeben*, and many online outlets, including:

- *Krafla Magma Testbed*. AGU TV, WebsEdge Science ([https://www.youtube.com/watch?v=Bf-yA\\_L8mZA](https://www.youtube.com/watch?v=Bf-yA_L8mZA))
- *MISSION: Construire une base dans un volcan, un défi scientifique extrême*. Science&Vie. 02/2022
- *Hot tuff not so tough*. Research highlights of “How tough is tuff in the event of fire” in *Nature* 484, 144.
- *Hot, warm or cold?: New insight into how Giant’s Causeway*. UoL Press Release of Lamur et al., *Nature Comm*. 2018  
Triggered (statistics): 70 News Hits, 14,800 shares on social media; potential reach: 207,000,000 readers