Kaustubh Hakim

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Education

2014 – 2018	PhD	Astrophysics & Geochemistry	University of Amsterdam, Netherlands
2012 – 2014	MSc	Astronomy & Astrophysics	KU Leuven, Belgium
2006 – 2010	BTech	Electronics Engineering	IIT Kharagpur, India

Professional & Research Experience

2019 – present	Postdoctoral Researcher, University of Bern, Bern, Switzerland
2014 (2 months)	Researcher, Nicolaus Copernicus Astronomical Center, Warsaw, Poland
2013 (1 week)	Observer, Mercator Telescope, La Palma, Spain
2010 – 2012	Analyst, Nomura (investment bank), Mumbai, India
2009 (3 months)	Developer, IBM, Bengaluru, India

Teaching

2020	Radiative Transfer, MSc Physics, University of Bern
2018	Planetary Science, MSc Earth Sciences, VU Amsterdam
2015 – 2017	Interstellar Medium, MSc Astrophysics, Uni. of Amsterdam

Supervision

2018	Dieke Beentjes, BSc Earth Sciences, VU Amsterdam
2016	Rob Spaargaren, BSc Earth Sciences, VU Amsterdam

Seminars

2020	Tata Institute of Fundamental Research, Mumbai, India
2017	University of Chicago, Illinois, USA

Leadership

2016 – 2017	PhD Representative, PhD-PostDoc Council, University of Amsterdam
2012 – 2014	Student Representative, Permanent Education Committee, KU Leuven
2016	Organizer, Planetary Science Network Meeting, University of Amsterdam

Science Communication

2019	Speaker, Astronomy on Tap, Bern, Switzerland
2018	Participant, FameLab, Amsterdam, Netherlands
2017	Volunteer, Public Stargazing Nights, Univeristy of Amsterdam, Netherlands
2016	Speaker, University of Los Andes, Bogotá, Colombia

Journal Referee

Astronomy & Astrophysics
Journal of Geophysical Research Planets
Monthly Notices of the Royal Astronomical Society

Publications

5 first-author peer-reviewed and 12 other publications

Peer-reviewed

- Hakim, K., Bower, D. J., Tian, M., Deitrick, R., Auclair-Desrotour, P., Kitzmann, D., Dorn, C., Mezger, K., Heng, K., Lithologic Controls on Silicate Weathering Regimes of Temperate Planets *in review, Planetary Science Journal (2020)*
- Hakim, K., van den Berg, A., Vazan, A., Höning, D., van Westrenen, W., Dominik, C., Thermal evolution of rocky exoplanets with a graphite outer shell, *Astronomy & Astrophysics 630, A152 (2020)*
- Hakim, K., Spaargaren, R., Grewal D.S., Rohrbach A., Brendt J., Dominik, C., van Westrenen, W., Mineralogy, structure and habitability of carbon-enriched rocky exoplanets: A laboratory approach, *Astrobiology 19, 7 (2019)*
- Hakim, K., van Westrenen, W., Dominik, C., Capturing the oxidation of silicon carbide in rocky exoplanetary interiors, *Astronomy & Astrophysics 618, L6 (2018)*
- Hakim, K., Rivoldini, A., Van Hoolst, T., Cottenier, S., Jaeken, J., Chust, T., Steinle-Neumann, G., A new ab initio equation of state of hcp-Fe and its application to the interior structure and mass-radius relation of rocky super-Earths, *Icarus 313, 61−78 (2018)*

Others

- Hakim, K., Bower, D. J., Tian, M., Deitrick, R., Auclair-Desrotour, P., Kitzmann, D., Dorn, C., Mezger, K., Heng, K., The Role of Lithology in Silicate Weathering and CO2 Regulation on Rocky Exoplanets, *Europlanet Science Congress (2020)*
- Hakim, K., Tian, M., Auclair-Desrotour, P., Deitrick, R., Bower, D. J., Kitzmann, D., Dorn, C., Mezger, K., Heng, K., A Weathering Framework to Model the Inorganic Carbon Cycle on Rocky Exoplanets, *American Astronomical Society Meeting #236 (2020)*
- Hakim, K., Geochemistry of Carbon Cycles on Rocky Exoplanets, *European Geosciences Union, General Assembly (2020)*
- Hakim, K., The Role of Geosciences in Exoplanet Science, *European Geosciences Union, Geodynamics Division Blogs (2019)*
- Hakim, K., van den Berg, A., Vazan, A., Höning, D., van Westrenen, W., Dominik, C., Thermal evolution of rocky exoplanets covered with graphite, *Europlanet Science Congress−Division of Planetary Science Joint Meeting (2019)*
- Hakim, K., Auclair-Desrotour, P., Deitrick, R., Kitzmann, D., Bower, D. J., Dorn, C., Heng, K., Geochemistry of Carbon Cycles on Rocky Exoplanets, *Extreme Solar Systems Meeting (2019)*
- Hakim, K., Diving Deep Into Rocky Exoplanets, *PhD Thesis, University of Amsterdam (2018)*
- Hakim, K., A New Ultra-High-Pressure Equation Of State For Iron Gives Insight Into Super-Earth Interiors, *Science Trends (2018)*
- Rivoldini, A., Hakim, K., Van Hoolst, T., Cottenier, S., Jaeken, J., Chust, T., Steinle-Neumann, G., A New Ab Initio Equation of State of hcp-Fe and Its Implication on the Interior Structure and Mass-Radius Relations of Rocky Super-Earths, *American Geophysical Union, Fall Meeting (2017)*
- Hakim, K., van Westrenen, W., Dominik, C., Mineralogy of Carbon-Enriched Rocky Extra-Solar Planets from Laboratory Experiments, *48th Lunar and Planetary Science Conference (2017)*
- Van Hoolst, T., Rivoldini, A., Hakim, K., Jaeken, J., Cottenier, S., High-pressure equations of state for iron and the interior structure of super-Earths, *European Planetary Science Congress (2014)*
- Hakim, K., The interior structure of super-Earths, *MSc Thesis, KU Leuven (2014)*