

ROBERTO BUGIOLACCHI

SPACE SCIENCE INSTITUTE (SSI)

MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY – AVENIDA WAI LONG - MACAU

Email: rbugiolacchi@must.edu.mo - info@bugiolacchi.com

Website: www.science.bugiolacchi.com

Tel. +853 8897 1915

PROFESSIONAL EXPERIENCE

Ongoing - 2016 **Macau University of Science and Technology, Space Science Institute (SSI), Macau**

Assistant Professor. Working on a variety of projects including analysis of data from the Chinese lunar missions and outreach projects.

2015 - 2012 **Birkbeck, University of London (BBK), Centre for Planetary Sciences (CPS), London, UK**

Joined the [MoonZoo](#) citizen science team as a Leverhulme-funded post-doc researcher. Leading the data analysis and the project's publishing output. Head of outreach and educational activities. Supervisor of two PhD candidates. Based at the Centre for Planetary Sciences at UCL ([CPS](#)).

2012 - 2008 **Max Planck Institute for Solar System Research (MPS), Göttingen, Germany**

Post-Doctoral position within the SIR-2 team (Spectrometer InfraRed) working on data analysis and geological interpretation. Developed a new spectral analysis technique (CNA). Other tasks include development of both content and artwork of mission's website, delivery of intradepartmental geological seminars, PR, outreach, etc.

2008 - 2003 **Sound Base Studios Trust, Hitchin (Herts), UK**

Head Tutor, organizing and co-ordinating teaching staff and resources, teaching Multimedia, Music Technology, and English. Also setting up, running, and engineering at Sound Base's professional recording studio.

Earlier employment record available on request

EDUCATION (HIGHER)

2006 - 2001 **PhD in Geology (Planetary Science)**

University College London ([UCL](#)), London, UK

"The Nubium and Imbrium Regions on the Moon: a History of Mare Flows".

Prof. John Guest (UCL) and Dr. Paul Spudis (LPI) supervisors. The Lunar and Planetary Institute (LPI), USA, provided the necessary hardware and software required for analysing Clementine multispectral image data.

2000 - 1999 **Post Graduate Certificate of Education (PGCE)**

Institute of Education ([IE](#)), London, UK

Qualified as science Secondary School teacher. Apprenticeship and teaching at the IE, Farnham College, and Dulwich College (UK).

1999 - 1996 **B.Sc. (Hon) degree on Planetary Science**

University College London (UCL), London, UK

Earlier educational record available on request

AFFILIATIONS AND OTHER PROJECTS

On-going	Reviewer for the following journals: Science - JGR-Planets - Earth, Moon, and Planets
September 2014	Geology field trip expedition at Marche/Umbria mountains, Italy (11-19/9). Demonstrator and driver. Third year UCL Geology field trip. Mapping of Apennine outcrops including K/T boundary.
August 2014	Geology field trip expedition at salty lakes in Saskatoon, Canada (27/8 - 3/9). Collection of water and soil samples at around 100 lakes to compare salinity and look for unusual chemistries.
On-going	University College London (UCL), London, UK Lecturer - Introduction to Planetary Science, The Moon, Earth Sciences BSc.
2009	Planetary Geology Course (IMPRS), Katlenburg-Lindau, Germany Delivery own Planetary Geology course to PhD students at the: International Max Planck Research School on Physical Processes in the Solar System and Beyond at the Universities of Braunschweig and Göttingen.
2009	Galilean Nights project (UK and USA based) Advisory body member. An International Year of Astronomy 2009 Cornerstone Project. In charge of lunar outreach materials including Power Point presentation and website content.
2009	Niels Bohr Institute, Copenhagen, Denmark Member of the evaluation committee team of three for the granting of PhD degree (analysis of data from the Mars Exploration Rovers), including public discussion and questioning of the candidate's thesis.

INVITED TALKS (SELECTED)

08/06/2016	International Symposium on Lunar and Planetary Science (ISLPS 2016), Wuhan, China – “Survey and analysis of the craters population in the Apollo 17 region: Wider implications for crater geochronology”.
10/09/2015	2nd International Forum on Lunar and Deep Space Exploration , Chinese Academy of Science, Beijing, China – “The Apollo 17 Region Impact History Revisited through a New Crater Distribution Map”.
21/05/2015	Workshop on issues in Crater Studies and the Dating of Planetary Surfaces , John Hopkins University, APL, Laurel, US – “Moon Zoo Citizen Science Project – Analysis, Evaluation, and Conclusions”
20/05/2015	Workshop on issues in Crater Studies and the Dating of Planetary Surfaces , John Hopkins University, APL, Laurel, US – “New insights into the crater and boulder distributions across the Apollo 17 region”
14/05/2015	European Lunar Symposium 2015 (ELS) , Frascati, Italy – “New insights into the crater and boulder distributions across the Apollo 17 region”
05/02/2015	APEX talks , UCL, London, UK – “A detailed study of small craters and boulders at the Apollo 17 landing site”.
25/06/2014	National Astronomy Meeting 2014 (NAM) , Portsmouth, UK – “Trends in distribution of small craters in the Apollo 17 region”
15/05/2014	European Lunar Symposium 2014 , NHM, London, UK – “Trends in distribution of small craters in the Apollo 17 region”
09/10/2013	British Machine Vision Association (BMVA) , London, UK – “Dating Lava Flows on the Moon Using Crater Counting”
12/09/2013	EPSC 2013 , London, UK – “MoonZoo: A Citizen Science Project”
09/09/2013	EPSC 2013 , London, UK – “Comparative Normalisation Analysis (CNA) of the Imbrium region using Near-Infrared data from the SIR-2 instrument”
22/05/2013	Planetary Seminars , Max Planck Institute for Solar System Research (MPS), Germany – “From Copernicus to Tycho, a journey in the near-infrared – unravelling patterns and mineralogical information from SIR-2 lunar spectral data”
21/03/2013	APEX talks , UCL, London, UK – “The Moon: A personal journey”
21/11/2011	LPI Seminar Series, USRA , Houston, TX, US – “Remote sensing of the lunar surface focusing on the Imbrium region: a personal journey”
09/03/2011	LPSC , Houston, TX, US – “A near-Infrared Reflectance Survey Across Lunar Crater Aristoteles”
03/03/2010	LPSC , Houston, TX, US – “A fresh look at the Copernicus Crater Central Peak Region Through High-Resolution NIR Data from the SIR-2 Instrument on Chandrayaan-1”
18/09/2009	EPSC 2009 , Potsdam, Germany – “SIR-2 as an important geological investigative tool”

OTHER SKILLS AND QUALIFICATIONS

- Computer literate. Excellent working familiarity with leading word-processing and graphic software packages, both PC and Mac based, including SQL and ArcGIS.
 - Extensive experience as team-leader and project manager. Extremely varied range of professional responsibilities entertained through the years, ranging from staff training courses to budget holding and marketing.
 - 20 Academic credit points 'Artworks – Young people, the arts and social inclusion course' (2007).
 - Professional-grade guitar player, music producer, published songwriter, recording studio manager and designer.
 - Languages: fluent in both Italian and English. Good knowledge of French and Spanish.
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PUBLICATIONS (PEER REVIEWED ONLY, abstracts available online)

Bugiolacchi R., Bamford S., Tar P., Thacker N., Crawford I., Joy K., Grindrod P., Lintott C. 2016. The MoonZoo citizen science project: Preliminary results for the Apollo 17 landing site. *Icarus*, Volume **271**, pp. 30-48. [10.1016/j.icarus.2016.01.021](https://doi.org/10.1016/j.icarus.2016.01.021)

Bugiolacchi R. 2014. Review of: Introducing the Planets and their Moons by Peter Cattermole (Dunedin, 2014, 134 pages). *Earth, Moon, and Planets*. [10.1007/s11038-014-9453-7](https://doi.org/10.1007/s11038-014-9453-7)

^Bugiolacchi R., Mall U., Bhatt M., McKenna-Lawlor S., Brønstad K., and Ullaland K. 2013. From the Imbrium Basin to crater Tycho: The first regional spectral distribution map derived from SIR-2 near infrared data. *Icarus*, Volume **233**, pp. 804-818. [10.1016/j.icarus.2013.01.018](https://doi.org/10.1016/j.icarus.2013.01.018)

***Bugiolacchi R.**, Mall U., Bhatt M., McKenna-Lawlor S., Banaszkiwicz M., Brønstad K., Nathues A., Søråas F., and Ullaland K. 2011. An In-Depth Look at Copernicus Crater: Exposed Mineralogy by High-Resolution Near-Infrared Spectroscopy. *Icarus*, Volume **213**, pp. 43-63. [10.1016/j.icarus.2011.02.023](https://doi.org/10.1016/j.icarus.2011.02.023)

Bugiolacchi R., and Guest J. E. 2008. Compositional and temporal investigation of exposed lunar basalts in the Mare Imbrium region. *Icarus*, Volume **197**, Issue 1. pp. 1-18. [10.1016/j.icarus.2008.04.001](https://doi.org/10.1016/j.icarus.2008.04.001)

^Bugiolacchi R., Spudis P. D., and Guest J. E. 2006. Stratigraphy and composition of lava flows in Mare Nubium and Mare Cognitum. *Meteoritics & Planetary Science* 41, **Nr2**, pp. 285-304(20). [10.1111/j.1945-5100.2006.tb00210.x](https://doi.org/10.1111/j.1945-5100.2006.tb00210.x)

Bhatt M., Mall U., Wohler C, Grumpe A., and **Bugiolacchi R.** 2015. A comparative study of iron abundance estimation methods: Application to the western nearside of the Moon. *Icarus*, Volume **248**, pp. 72-88. [10.1016/j.icarus.2014.10.023](https://doi.org/10.1016/j.icarus.2014.10.023)

Mall, U., Wohler, C., Grumpe, A., **Bugiolacchi R.**, Bhatt M., 2014. Characterization of lunar soils through spectral features extraction in the NIR. *Adv. in Space Res.* Volume 54, Issue 10, p. 2029-2040. [10.1016/j.asr.2013.07.030](https://doi.org/10.1016/j.asr.2013.07.030)

Bhatt M., Mall U., **Bugiolacchi R.** et al., 2012. Lunar iron abundance determination using the 2- μ m absorption band parameters, *Icarus*, Volume **220**, Issue 1. pp. 51-64. [10.1016/j.icarus.2012.04.010](https://doi.org/10.1016/j.icarus.2012.04.010)

*Selected as one of the 14 papers best representing “the advances in scientific insight and understanding...” in “Virtual Issue on the surface composition of the Moon”, *Icarus*, 2014

^One or more figures used as cover image on the journal issue.
