

Driss Takir, Ph.D.

EDUCATION

- 2013** **Ph.D.** Planetary Science, the University of Tennessee, Knoxville, TN
2008 **M.S.** Space Studies, University of North Dakota, Grand Forks, ND
2006 **B.S.** Computer Science, Portland State University, Portland, OR
 Physics, University of Hassan II, Casablanca, Morocco

PROFESSIONAL EXPERIENCE

- 2017 – present **Planetary Scientist**, Jacobs, NASA JSC, Houston, TX
2007 – present **Visiting Astronomer**, NASA Infrared Telescope Facility, Mauna Kea, HI
2015 – 2016 **Shoemaker Fellow**, U.S. Geological Survey, Flagstaff, AZ
2013 – 2017 **Collaborator**, NASA OSIRIS-REx Science Team
2013 – 2015 **OSIRIS-REx Postdoctoral Research Fellow**, Ithaca College, Ithaca, NY
2009 – 2013 **Graduate Research Fellow**, University of Tennessee, Knoxville, TN
2008 **Visiting Researcher**, Indian Institute of Astrophysics, Bangalore, India
2007 – 2008 **Graduate Research Fellow**, University of North Dakota, Grand Forks, ND

MISSION TEAMS

- 2021 – present **Co-I**, JAXA's Hayabusa2 SHARP Extended Mission
2019 – present **Co-I**, JAXA's Martian Moon eXploration Mission
2018 – present **Affiliate**, JAXA's DESTINEY+ Mission
2017 – 2020 **Co-I**, JAXA's Hayabusa2's NIRS3 instrument team
2016 – 2020 **U.S. Participating Scientist**, JAXA's Hayabusa2

AWARDS AND HONORS

- 2021 JAXA Honor Award for participating in the Hayabusa2 mission
2017 NASA Silver Achievement Medal with OSIRIS-REx's Astronomy WG
2016 NASA Planetary Science Early Career Fellowship
2015 NASA/USGS Eugene Shoemaker Fellowship
2015 Outstanding contribution in peer-reviewing, *Icarus*
2014 Asteroid (23898) Takir
2012 Graduate Student Professional Promise Awards, Univ. of Tennessee
2012 PGI outstanding LPSC talk, Univ. of Tennessee
2011 NASA Cosmochemistry Travel Award, 74th MetSoc, London, UK
2011 Hartmann Travel Award, EPSC-DPS joint meeting, Nantes, France
2011 Graduate Student Senate Travel Award, University of Tennessee

PROFESSIONAL SERVICE AND ORGANIZATIONS

- 2013 – present Review panel member and chair for NASA and NSF
2016 – present Reviewer for PDS Small Bodies Node
2012 – present Reviewer for *Science*, *Nature*, *Nature Astronomy*, *Nature Communications*,
Icarus, *Astronomy & Astrophysics*, *Astrophysical Journal Letters*, *Astro-*
nomical Journal, *MNRAS*, *American Mineralogist*, *AAS Planetary Science*,
Meteoritics & Planetary Science
2017 – 2019 TAC member for NASA IRTF
2019 – present TAC member for NOAO
2020 – present TAC member for JWST SYScI
2021 – present Member of the American Astronomical Society's Division for Planetary
Science Professional Culture & Climate Subcommittee

- 2022 – present Secretary of the International Astronomical Union Commission F4
Asteroids, Comets & Transneptunian Objects
- 2024-present Member of the International Astronomical Small Bodies Nomenclature
Working Group
- 2014, 2019 Scientific Organizing Committee, NASA SSERVI ESF, Moffett Field, CA
- 2018 – 2024 Scientific Organizing Committee, LPSC, Houston, TX
- 2023 AAS DPS Scientific Organizing Committee
- 2014 Session Chair, AAS DPS, Tucson, AZ
- 2018, 2019 Session Chair, LPSC, Houston, TX
- 2009 – present AAS, Division for Planetary Sciences, the Meteoritical Society
- 2010 – present Meteoritical Society
- 2017 – present AGU, Division for Planetary Sciences

SELECTED PEER-REVIEWED JOURNAL ARTICLES

- Takir, D.** et al. (2024) Origin of Asteroid (101955) Bennu and its Connection to the New Polana Family. *Scientific Reports* 14 (15965).
- Amano, K., co-authors, **Takir, D.** (2023) Re-assigning CI chondrite parent bodies based on reflectance spectroscopy of samples from carbonaceous asteroid Ryugu and meteorites. *Science Advances Journal*. Vol 9, Issue 49.
- Takir, D.**, Neumann, W., Raymond, S.N., Emery, J.P., Tieloff, M. (2023) Late Accretion of Ceres-like Asteroids and Their Implantation into the Outer Main Belt. *Nature Astronomy* 7, 524-533.
- Matsuoka, M. et al., **Takir, D.** et al. (2023) Space weathering acts strongly on the uppermost surface of Ryugu. *Communications Earth & Environment*, Volume 4, 335.
- Nakamura, T., 210 co-authors, **Takir, D.** (2022) Formation and evolution of carbonaceous asteroid Ryugu: Direct evidence from returned samples. *Science* 379, 6634.
- Kitazato, K., co-authors, **Takir, D.** (2021). Thermally altered subsurface material of asteroid (162173) Ryugu. (2021), *Nature Astronomy*, *Nature Astronomy*, Volume 5, 246-250.
- Takir, D.**, Kareta, T., Reddy, V., Emery, J., Hanuš, J., Howell, E., Rivkin, A., Arai, T. (2020). Near-infrared Observations of Active Asteroid (3200) Phaethon Reveal no Evidence for Hydration *Nature Communications*, 11, 50.
- Takir, D.**, Stockstill-Cahill, K.R., Hibbitts, C.A. Nakauchi, Y (2019). 3- μ m Reflectance Spectroscopy of Carbonaceous Chondrites under Asteroid-like Conditions. *Icarus* Volume 333, Pages 243-251
- Kitazato, K., **Takir, D.**, and other co-authors (2019). The surface composition of asteroid 162173 Ryugu from Hayabusa2 near-infrared spectroscopy. *Science* 364, Issue 6437.
- Takir, D.**, Howards, K., Yabuta, H., McAdam, M., Hibbitts, C.A., Emery, J. (2018), Linking Water-rich Asteroids and Meteorites: Implications for Asteroid Space Missions. In *Primitive Meteorites and Asteroids* (Neyda Abreu, editor). Elsevier Publisher.
- Takir D.**, Emery J.P., and McSween H.Y. (2015). Toward an Understanding of Phyllosilicate Mineralogy in the Outer Main Belt Region. *Icarus* 257:185- 193.
- Takir D.**, Emery J.P., McSween H.Y., Hibbitts, C.A., Clark, R.N., Pearson, N., and Wang, A. (2013). Constraints and Nature and the degree of aqueous alteration in CM and Carbonaceous chondrites. *Meteoritics & Planetary Sciences*, 48, 1618-1637.
- Takir D.** and Emery J.P. (2012). Outer Main Belt asteroids: Identification and distribution of Four 3- μ m spectral groups. *Icarus*, 219, 641-654.