

Inge Loes ten Kate

Personal details

Last name ten Kate
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Middle name Loes
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Education

2001-2006 Doctor of Philosophy (PhD) Astronomy, Leiden University, the Netherlands
Thesis: Laboratory investigations on organic material on the Martian surface.

1993-1999 Master of Science (MS) in Aerospace Engineering, Delft University of Technology, the Netherlands.
Thesis: Preliminary design of aerocapture manoeuvres around Mars.

1987-1993 Grammar School, Marnix Gymnasium, Rotterdam, the Netherlands

Research Experience

2012-present Researcher - Department of Earth Sciences - Faculty of Geosciences - Utrecht University, Netherlands
The role of perchlorates in the preservation of organics on Mars

2011-2012 Visiting Scientist at PGP - Physics of Geological Processes, Oslo University, Norway
Dust - magnetic field interactions on Mars
Pressure effects on evolved gas temperatures
Co-I: VAPoR: Volatile Analysis by Pyrolysis of Regolith. (NASA-ROSES; PI: D. P. Glavin)
PI: VAPoR in the Field - Linking Science with Planetary Resource Exploration (NASA-ROSES)
Collaborator Participating Scientist Team MSL/Curiosity (NASA; PI: D. P. Glavin)

2006-2011 Assistant Research Scientist, National Aeronautics and Space Administration - Goddard Space Flight Center (NASA-GSFC), Goddard Earth Science and Technology Center - University of Maryland, Baltimore County (GEST-UMBC), Greenbelt, MD, USA.
Laboratory investigations on electrification processes in the martian atmosphere.
Co-I: VAPoR: Volatile Analysis by Pyrolysis of Regolith. (PI: D. P. Glavin)
Co-I: Cavity Ring-Down Mass Spectrometer for Methane on Mars (PI: T. C. Onstott)
Collaborator: Sample Analysis at Mars (PI: P. R. Mahaffy)
Collaborator: Laser Desorption Mass Spectrometer (PI: W. B. Brinckerhoff)
Collaborator: Precision Subsampling System for Mars (PI: W. B. Brinckerhoff)

2006 Post-doctoral researcher, Leiden Institute of Chemistry, Leiden University, the Netherlands.
Halophilic archaeon *Natronorubrum* species in extreme environments.

2001-2006 PhD researcher, Leiden Observatory, Leiden University, the Netherlands.
Thesis: Laboratory investigations on organic material on the Martian surface.

1999 MS researcher, Mechanical and Aerospace Engineering, University of California, Irvine, USA and
Aerospace Engineering, Delft University of Technology, the Netherlands.
Thesis: Preliminary design of aerocapture manoeuvres around Mars.

Industry Experience

2000-2001 Research Engineer, National Aerospace Laboratory NLR, the Netherlands.
System and signal validation for the European satellite navigation system GalileoSat.

1998 Intern, Ariespace, France.
Design of data archiving tool for Ariane 4 and 5 launch and flight data.

Editorial Experience

- 2011-present *Editor*: International Journal of Astrobiology
 2009-present *Editor*: Astrobiology
Reviewer: Icarus, Journal of Geophysical Research, Planetary and Space Science, Advances in Space Research, Sensors, Origin of Life and Evolution in the Biosphere

Community Service

- 2013-present Horizon2020 Space Advisory Board
 2013-present *Theme coordinator*: NWO-PEPSci network
 2013 *Review panel*: EC FP7-SPACE-2013 program
 2009 *External reviewer*: NASA Research Opportunities in Space and Earth Science

Teaching Experience

- 2013 Redesigned Introduction to Planetology curriculum; taught the full course
 Supervised "Design your own Planetary Mission" projects
 Lecture on Mars in Planetary Science II - Delft University of Technology
 2012 Lectures on Mars in Introduction to Planetology, Utrecht University, and VU Amsterdam
 Supervised "Design your own Planetary Mission" projects
 2006 Astrobiology, Higher Education for Older People (HOVO), Leiden University, the Netherlands
 2002-2004 Lecture assistant for the Astrobiology class, Faculty of Science, Leiden University, the Netherlands
 1998 Teaching assistant flight dynamics, Faculty of Aerospace Engineering, Delft University of Technology, the Netherlands

Student Supervision

- 2014 Co-promotor of 4 PhD students
 2013 4 Earth Sciences bachelor students
 2008,2009 Mentoring summer interns at Goddard Space Flight Center
 2009 Co-supervising high school students from 't Hooghe Landt in Amersfoort, the Netherlands

Field Experience

- 2012 NASA Moon and Mars Analog Mission Activities (MMAMA) Campaign, instrument field testing - Mauna Kea, Hawaii, USA
 2011 NASA Desert RATS (Desert Research and Technology Studies), instrument field testing - Black Point Lava Flow, AZ, USA
 2010-2011 ANSMET - Antarctic Search for Meteorites - 2 month campaign, including 6 weeks field camp in Davis-Ward region, Dominion Range, Antarctica
 2010 AMASE - Arctic Mars Analogue Svalbard Expedition - 3 week instrument testing and Mars analogue study in Ny Ålesund, Svalbard, Norway.
 2010 International Lunar Surface Operations - In Situ Resource Utilization, instrument field testing - Mauna Kea, Hawaii, USA
 2008 Two-week paleomagnetic sampling campaign in Lycean Nappes, Turkey.

Convened and Chaired Conference Sessions

- 2009 Astrobiology: Meteorites, Microbes, Hydrous Habitats, and Irradiated Ices, 40th Lunar and Planetary Science Conference, The Woodlands, TX, March 23-27, 2009.
 2008 Advances in Astrobiological Instrument Development, AbSciCon 2008, Santa Clara, California, April 14-17, 2008.
 2008 Laboratory Analogue Environments for Studying Geochemical and Biological Processes on Planetary Surfaces, AbSciCon 2008, Santa Clara, California, April 14-17, 2008.

Scientific presentations (oral)

- 2013 - "Experimentally studying extraterrestrial organic processes", 5th Conference of the Astrobiology Society of Britain, Edinburgh, April 16-19, 2013
 2012 - "ANSMET, the Antarctic Search for METorites campaign 2010-2011", NASA Head Quarters, Washington DC, USA (INVITED)
 2010 - "Fieldwork for planetary scientists: *In situ* analyses and laboratory simulations." VU University Amsterdam, the Netherlands (INVITED)
 2009 - ten Kate I. L., Mahaffy P. R., Jackson T. L., and Farrell W. M. "Dust storm electrification in a Mars chamber." *European Planetary Science Conference*. Potsdam, Germany, September 14-18, 2009.

- 2008
- ten Kate I. L., Glavin D. P., and the VAPoR team (2008) "VAPoR: Analyzing lunar regolith by pyrolysis mass spectrometry." *Cyanobacteria in the Lunar Environment Workshop*, Moffet Field, California, January 29-31, 2008.
 - ten Kate I. L. and Mahaffy P. R. (2008), "Laboratory investigations on discharge in the martian atmosphere". *AbSciCon 2008*, Santa Clara, California, April 14-17, 2008.
 - ten Kate I. L., Malespin C. A., Glavin D. P., and the VAPoR team (2008), "VAPoR bread-board development, first pyrolysis results". *Joint Annual Meeting of LEAG-ICEUM-SRR*, Cape Canaveral, Florida, October 28-31, 2008.
 - Mass spectrometry in planetary science. Netherlands Institute for Space Research (SRON) (INVITED).
- 2006
- ten Kate I. L. and Mahaffy P. R. (2006) "Mitigation of the impact of terrestrial contamination on organic measurements from the Mars Science Laboratory, 2006 Fall Meeting American Geophysical Union, San Francisco, CA, USA.
 - ten Kate I. L. (2006) Laboratory studies of organic material under simulated martian conditions. *18th Rencontres de Blois*, France (INVITED).
 - ten Kate I. L. (2006) Laboratory simulations on complex organics on Mars", *8th Dutch Earth Sciences Conference (NAC)*, Velthoven, the Netherlands.
 - ten Kate I. L. (2006) Planetary science and life. *1st Dutch National Planetary Sciences Platform (NPP) meeting*, Velthoven, the Netherlands (INVITED).
 - "The behaviour of halophilic archaea under martian conditions", *General Assembly of the European Geosciences Union*, Vienna, Austria.
- 2005
- "Mars simulations in support of planetary exploration", Pacificchem, Honolulu, HI, USA.
 - "Glycine and D-alanine in Mars like conditions", *General Assembly of the European Geosciences Union*, Vienna, Austria.
- 2003
- "Behaviour of organic molecules under simulated Mars conditions", *3rd European Workshop on Astrobiology*, Madrid, Spain.
 - "Laboratory simulations on complex organics on Mars", *34th Lunar and Planetary Science Conference*, Houston, TX, USA.
- 2002
- "Laboratory simulations on complex organics on Mars", *2nd European Workshop on Astrobiology*, Graz, Austria

Skills

- laboratory
- Fourier Transform-Infra Red (FT-IR) and Ultra Violet/Visible (UV/Vis) spectroscopy
 - mass spectrometry
 - cryogenic and vacuum techniques
 - basic machine shop skills for building airplane parts and laboratory simulation facilities
 - chemical vapour deposition techniques
 - High-Performance Liquid Chromatography (HPLC)
 - Gas Chromatography - Mass Spectrometry (GCMS)
 - methods for extraction, purification and detection of low (ppb) abundances of organic compounds in soil samples
 - microbiological cell culturing techniques
- computer
- experienced: MacOS and Windows user, Office, Adobe, analytical software tools
 - basic: Linux, IDL, Basic, Matlab, HTML.
- languages
- Dutch (native)
 - English (fluent)
 - French (good)
 - German (basic)
- engineering
- instrument design and testing for planetary missions (pyrolysis mass spectrometer for the moon, x-ray diffractometer for Mars)
 - design and manufacturing of laboratory simulation facilities, with focus on planetary conditions

Inge Loes ten Kate - publications

Peer-reviewed journal articles

13. Stern J., McAdam A, **ten Kate I. L.**, Blake D., Morris R. V., Bowden R., Fogel M., Glamoclija M., Mahaffy P., Steele A., Amundsen H. (2013) Isotopic and Geochemical analysis of carbonates by evolved gas techniques: Simulating isotopic measurements for Mars surface operations in Svalbard, Norway. *Icarus*, 224, 297-308. (1 citation)
12. **ten Kate I. L.**, Armstrong R., Bernhardt B., Blumers M., Craft J., Boucher D., Caillibot E., Captain J., Deleuterio G., Farmer J. D., Glavin D. P., Graff T., Hamilton J. C., Klingelhöfer G., Morris R. V., Nuñez J. I., Quinn J. W., Sanders G. B., Sellar R. G., Sigurdson L., Taylor R., Zacny K. (2012) Mauna Kea, Hawai'i, as an analogue site for future planetary resource exploration: Results from the 2010 ILSO-ISRU field-testing campaign. *Journal of Aerospace Engineering* 26 (1), 183-196. (1 citation)
11. Keheyany Y. and ten Kate I. L. (2012) Radiolytic studies of naphthalene in the presence of water. *Origins of Life and the Evolution of the Biosphere*. 42(2):179-186. DOI 10.1007/s11084-012-9285-2.
10. Manning H. M., **ten Kate I. L.**, Battel S., and Mahaffy P. M. (2010) Electric discharge in the Martian atmosphere, Paschen curves and implications for future missions. *Advances in Space Research* 46(10), 1334-1340. (2 citations)
9. Peeters Z., Vos, D., **ten Kate I. L.**, Selch F., van Sluis C. A., Sorokin D. Yu., Muyzer G., Stan-Lotter H., van Loosdrecht M. C. M., and Ehrenfreund P. (2010) Survival and death of the haloarchaeon *Natronorubrum* strain HG-1 in a simulated martian environment. *Advances in Space Research* 46(9), 1149-1155. (2 citations)
8. Getty S. A., **ten Kate I. L.**, Feng S. H., Brinckerhoff W. B., Cardiff E. H., Holmes V. E., King T. T., Li M. J., Mumm E., Mahaffy P. R., Glavin D. P. (2010) Development of the VAPoR Instrument: a Pyrolysis-Time-of-Flight Mass Spectrometer. *International Journal of Mass Spectrometry* 295, 124-132. (8 citations)
7. **ten Kate I. L.** (2010) Organics on Mars? *Astrobiology* 10(6), 589-603 (INVITED). (18 citations)
6. **ten Kate I. L.**, Cardiff E. H., Dworkin J. P., Feng S. H., Holmes V., Malespin C., Stern J., Swindle T. D., and Glavin D. P. (2010) VAPoR - Volatile Analysis by Pyrolysis of Regolith - an instrument for in situ detection of water, noble gases, and organics on the Moon. *Planetary and Space Science* 58, 1007-1017. (10 citations)
5. **ten Kate I. L.**, Canham J. S., Conrad P. G., Errigo Th., Katz I., Mahaffy P. R. (2008) Mitigation of the impact of terrestrial contamination on organic measurements from the Mars Science Laboratory, *Astrobiology* 8(3), 571-582. (8 citations)
4. Garry J. R. C., **ten Kate I. L.**, Martins Z., Nørnberg P., Ehrenfreund P. (2006) Analysis and survival of amino acids in Martian regolith analogs, *Meteoritics and Planetary Science* 41(3), 391-405. (33 citations)
3. **ten Kate I. L.**, Garry J. R. C., Peeters Z., Foing B. H., Ehrenfreund P. (2006) The effects of Martian near surface conditions on the photochemistry of amino acids, *Planetary and Space Science* 54, 296-302. (42 citations)
2. **ten Kate I. L.**, Garry J. R. C., Peeters Z., Quinn R. C., Foing B. H., Ehrenfreund P. (2005) Amino acid photostability on the Martian surface, *Meteoritics and Planetary Science* 40(8), 1185-1193. (61 citations)
1. **ten Kate I. L.**, Ruitkamp R., Botta O., Lehmann B., Gomez Hernandez C., Boudin N., Foing B. H., Ehrenfreund P. (2003) Investigating complex organic compounds in a simulated Mars environment, *International Journal of Astrobiology* 1(4), 387-399. (11 citations)

Peer-reviewed MSL Science Team papers

7. Webster C. R., Mahaffy P. R., Atreya S. K., Flesch G. J., Farley K. A., MSL Science Team (2013) Low Upper Limit to Methane Abundance on Mars. *Science* 342(6156), 355-357.
6. Meslin P.-Y., Gasnault O., Forni O., Schröder S., Cousin A., Berger G., Clegg S. M., Lasue J., Maurice S., Sautter V., Le Mouélic S., Wiens R. C., Fabre C., Goetz W., Bish D., Mangold N., Ehlmann B., Lanza N., Harri A.-M., Anderson R., Rampe E., McCannochie T. H., Pinet P., Blaney D., Léveillé R., Archer D., Barraclough B., Bender S., Blake D., Blank J. G., Bridges N., Clark B. C., DeFlores L., Delapp D., Dromart G., Dyar M. D., Fis M., Gondet M., Grotzinger J., Herkenhoff K., Johnson J., Lacour J.-L., Langevin Y., Leshin L., Lewin E., Madsen M. B., Melikechi N., Mezzacappa A., Mischna M. A., Moores J. E., Newsom H., Ollila A., Perez R., Renno N., Sirven J.-B., Tokar R., de la Torre M., 'Uston L., Vaniman D., Yingst A., MSL Science Team

- (2013) Soil diversity and hydration as observed by ChemCam at Gale Crater, Mars. *Science* 341(6153),1238670.
5. Bish D. L., Blake D. F., Vaniman D. T., Chipera S. J., Morris R. V., Ming D. W., Treiman A. H., Sarrazin P., Morrison S. M., Downs R. T., Achilles C. N., Yen A. S., Bristow T. F., Crisp J. A., Morookian J. M., Farmer J. D., Rampe E. B., Stolper E. M., Spanovich N., MSL Science Team (2013) X-ray diffraction results from Mars Science Laboratory: Mineralogy of Rocknest at Gale crater. *Science* 341(6153),1238932.
 4. Leshin L. A., Mahaffy P. R., Webster C. R., Cabane M., Coll P., Conrad P. G., Archer Jr. P. D., Atreya S. K., Brunner A. E., Buch A., Eigenbrode J. L., Flesch G. J., Franz H. B., Freissinet C., Glavin D. P., McAdam A. C., Miller K. E., Ming D. W., Morris R. V., Navarro-González R., Niles, P. B., Owen T., Pepin R. O., Squyres S., Steele A., Stern J. C., Summons R. E., Sumner D. Y., Sutter B., Szopa C., Teinturier S., Trainer M. G., Wray J. J., Grotzinger J. P., MSL Science Team (2013) Volatile, isotope, and organic analysis of martian fines with the Mars Curiosity Rover. *Science* 341(6153),1238937.
 3. Blake D. F., Morris R. V., Kocurek G., Morrison S. M., Downs R. T., Bish D., Ming D. W., Edgett K. S., Rubin D., Goetz W., Madsen M. B., Sullivan R., Gellert R., Campbell I., Treiman A. H., McLennan S. M., Yen A. S., Grotzinger J., Vaniman D. T., Chipera S. J., Achilles C. N., Rampe E. B., Sumner D., Meslin P.-Y., Maurice S., Forni O., Gasnault O., Fisk M., Schmidt M., Mahaffy P., Leshin L. A., Glavin D., Steele A., Freissinet C., Navarro-González R., Yingst R. A., Kah L. C., Bridges N., Lewis K. W., Bristow T. F., Farmer J. D., Crisp J. A., Stolper E. M., Des Marais D. J., Sarrazin P., MSL Science Team (2013) Curiosity at Gale crater, Mars: Characterization and analysis of the Rocknest sand shadow. *Science* 341(6153),1239505.
 2. Mahaffy P. R., Webster C. R., Atreya S. K., Franz H., Wong M., Conrad P. G., Harpold D., Jones J. J., Leshin L. A., Manning H., Owen T., Pepin R. O., Squyres S., Trainer M., MSL Science Team (2013) Abundance and isotopic composition of gases in the martian atmosphere from the Curiosity rover. *Science* 341(6143),263-266.
 1. Williams R. M. E., Grotzinger J. P., Dietrich W. E., Gupta S., Sumner D. Y., Wiens R. C., Mangold N., Malin M. C., Edgett K. S., Maurice S., Forni O., Gasnault O., Ollila A., Newsom H. E., Dromart G., Palucis3M. C., Yingst R. A., Anderson R. B., Herkenhoff K. E., Le Mouélic S., Goetz W., Madsen1M. B., Koefoed A., Jensen J. K., Bridges J. C., Schwenzer S. P., Lewis K. W., Stack K. M., Rubin D., Kah L. C., Bell III J. F., Farmer J. D., Sullivan R., Van Beek T., Blaney D. L., Pariser O., Deen R. G., MSL Science Team (2013) Martian Fluvial Conglomerates at Gale Crater. *Science* 340(6136),1068-1072.

Peer-reviewed conference papers

10. Graham L.D. , Morris R. V., Graff T. G. , Yingst R. A., **ten Kate I. L.**, Glavin D. P., Hedlund M., Malespin C. A., Mumm E. (2013) Moon and mars analog mission activities for Mauna Kea 2012. *IEEE Aerospace Conference Proceedings* , # 6497195
9. Mellerowicz, B., Paulsen, G., Zacny, K., Craft, J., Brinckerhoff, W.B., **ten Kate, I.L.**, Conrad, P. (2012) Precision subsampling system for planetary exploration. *Earth and Space 2012 - Proceedings of the 13th ASCE Aerospace Division Conference and the 5th NASA/ASCE Workshop on Granular Materials in Space Exploration*, 512-525.
8. Glavin D. P., Malespin C., **ten Kate I. L.**, Getty S. A., Holmes V. E., Mumm E., Franz H. B., Noreiga M., Dobson N., Southard A. E., Feng S. H., Kotecki C. A., Dworkin J. P., Swindle T. D., Bleacher J. E., Rice J. W., and Mahaffy P. R. (2012) Volatile Analysis by Pyrolysis of Regolith for Planetary Resource Exploration. *IEEE Aerospace Conference Proceedings* #1180.
7. Chanover N. J., Glenar D. A., Voelz D. G., Xiao X., Tawalbeh R., Boston P. J., Brinckerhoff W. B., Mahaffy P. R., Getty S., **ten Kate I.**, McAdam A. (2011) An AOTF-LDTOF spectrometer suite for *in situ* organic detection and characterization. *IEEE Aerospace Conference Proceedings* #5747295. (7 citations)
6. Brinckerhoff W. B., **ten Kate I. L.**, Hernstig T., Mellerowicz B., Wilson J., Zacny K., Mumm E., Romani E. J., Conrad P., Franz H. B., Mahaffy P. R., Corrigan C. M., Onstott T. C. (2010) Precision Subsampling System for Mars and Beyond. *American Society for Civil Engineering Conf. Proc.* 366, 123-140, DOI:10.1061/41096(366)123.
5. Garcia R., Misra P., Mahaffy P. R., and **ten Kate I. L.** (2010) Database and Library Development of Organic Species using Gas Chromatography and Mass Spectral Measurements in Support of Sample Analysis at Mars. *Conference Proceedings of the NSBE Aerospace Conference, February 5-10, 2010, Los Angeles, California*, 280-285.
4. Garry J. R. C., **ten Kate I. L.**, Ehrenfreund P., Foing B. H. (2007) Response of organics to simulated martian conditions. In: *Response of organisms to the martian environment* edited by C. Cockell and G. Horneck, ESA Special Publication 1299, Noordwijk, the Netherlands, 47-58.
3. **ten Kate I. L.**, Ruitkamp R., Botta O., Lehmann B., Gomez Hernandez C., Boudin N., Foing B. H., and Ehrenfreund P. (2002) Laboratory studies on complex organic molecules on Mars. Part I - Rationale. In: *Earth-like planets and moons. Proceedings of the 36th ESLAB Symposium*, 3-8 June 2002, ESTEC, Noordwijk, The Netherlands. ESA SP-514. Eds.: B. Foing, B. Battrick. Noordwijk: ESA Publications Division. pp. 293 - 296.

2. **ten Kate I. L.**, Ruiterkamp R., Botta O., Lehmann B., Gomez Hernandez C., Boudin N., Foing B. H., and Ehrenfreund P. (2002) Laboratory studies on complex organic molecules on Mars. Part II - Experimental set-up and related work. In: *Proceedings of the First European Workshop on Exo-Astrobiology*, 16-19 September 2002, Graz, Austria. ESA SP-518. Ed.: Huguette Lacoste. Noordwijk: ESA Publications Division. pp. 81-85. (2 citations)
1. Lammer H., Wurz P., **ten Kate I. L.**, and Ruiterkamp R. (2002) Simulations of martian surface and subsurface processes. In: *Proceedings of the First European Workshop on Exo-Astrobiology*, 16-19 September 2002, Graz, Austria. ESA SP-518. Ed.: Huguette Lacoste. Noordwijk: ESA Publications Division. pp. 533-534.

Book chapters

1. Brinckerhoff W. B., Cornish T. J., Ecelberger S. A., Managadze G. G., Getty S. A., Corrigan C. M., **ten Kate I. L.**, Mahaffy P. R., Ganesan A. L. (2010) Miniature laser time-of-flight mass spectrometers for planetary missions. In: Lee, M. (Ed.), *Applied Mass Spectroscopy Handbook*. John Wiley and Sons. (1 citation)

Additional

17. **ten Kate I. L.**, Stern J. G., Malespin C. A., and Glavin D. P. (2011) Interaction of perchlorate with JSC Mars-1 during evolved gas analysis. (abstract #1011) *42nd Lunar and Planetary Science Conference* CD-ROM.
16. Stern J. C., McAdam A. C., **ten Kate I. L.**, Mahaffy P. R., Steele A., Amundsen H.E.F., and the AMASE 2010 team (2011). $\delta^{13}\text{C}$ analysis of Mars analog carbonates using evolved gas – cavity ringdown spectrometry on the 2010 Arctic Mars Analog Svalbard Expedition (AMASE). (abstract #2403) *42nd Lunar and Planetary Science Conference* CD-ROM.
15. McAdam A. C., **ten Kate I. L.**, Stern J. C., Mahaffy P. R., Blake D. F., Morris R. V., Steele A., Amundsen H.E.F. , and the AMASE 2010 Team (2011) Field characterization of the mineralogy and organic chemistry of carbonates from the 2010 Arctic Mars Analog Svalbard Expedition by evolved gas analysis. (abstract #2136) *42nd Lunar and Planetary Science Conference* CD-ROM.
14. **ten Kate I. L.**, Cardiff E. H., Swindle T. D., Johnson C. S., Feng S. H., Holmes V., Malespin C. A., Stern J. G., Dworkin J. P., Glavin D. P. (2010). Volatile Analysis By Pyrolysis Of Regolith: The Vapor Instrument Development. *Proceedings of the Global Lunar Conference* GLUC-2010.1.7.B.8. CDR0M
13. Brinckerhoff W. B., Cornish T. J., Ecelberger S. A., Corrigan S. M., Ganesan A. L., Getty S. A., and **ten Kate I. L.** (2010) Advancement of a Compact Reflectron TOF-MS for Planetary Sample Analysis (abstract #2358) *41st Lunar and Planetary Science Conference*. CD-ROM.
12. **ten Kate I. L.**, Mahaffy P. R., Jackson T. L., and Farrell W. M. (2009) Dust storm electrification in a Mars chamber. *European Planetary Science Conference*. CDR0M.
11. **ten Kate I. L.**, Zuray M. S., and Mahaffy P. R. (2009) Dust storm electrification in a Mars chamber: First results (abstract #2273). *40th Lunar and Planetary Science Conference*. CD-ROM.
10. **ten Kate I. L.**, Glavin D. P., and the VAPoR team (2009) Evolved gas analysis of two lunar simulants, Apollo 16 regolith and a carbonaceous meteorite (Murchison) using VAPoR (abstract #2232). *40th Lunar and Planetary Science Conference*. CD-ROM.
9. Brinckerhoff W. B., Zacny K., **ten Kate I. L.**, Kusack A., Conrad P. G., Franz H. B., Eigenbrode J., Mahaffy P. R, Corrigan C. M., and Onstott T. C. (2009) Precision subsampling system for in situ analysis at Mars (and beyond) (abstract #2240). *40th Lunar and Planetary Science Conference*. CD-ROM.
8. **ten Kate I. L.**, Malespin C. A., Glavin D. P. and the VAPoR team (2008) VAPoR bread-board development: First results (abstract #4038). *Joint annual meeting of LEAG-ICEUM-SRR*. CD-ROM.
7. Glavin D. P., **ten Kate I. L.**, Brinckerhoff W., Cardiff E., Dworkin J. P., Feng S., Getty S., Gorevan S., Harpold D., Jones A. L., Mahaffy P. R., Martin D., Moore M. H., Patrick E., Roberts D. P., Roman P., Simmons C., Stephenson T., and Swindle T. (2008) Volatile Analysis by Pyrolysis of Regolith (VAPoR) on the moon using mass spectrometry (abstract #2046). *1st NLSI Lunar Science Conference*. CD-ROM.
6. Glavin D. P., **ten Kate I. L.**, Brinckerhoff W., Cardiff E., Dworkin J. P., Feng S., Fristad K., Gorevan S., Harpold D., Jones A. L., King T., Mahaffy P. R., Martin D., Moore M. H., Roberts D. P., Roman P., and Stephenson T. (2008) Volatile Analysis by Pyrolysis of Regolith (VAPoR) on the moon using mass spectrometry (abstract #1097). *39th Lunar and Planetary Science Conference*. CD-ROM.

5. Steele A., Beegle L., DesMarais D., Sherwood-Lollar B., Neal C., Conrad P., Glavin D., McCollom T., Karcz J., Allen C., Vicenzi E., Cady S., Eigenbrode J., Papineau D., Starke V., Glamoclija M., Fogel M., Kerr L., Maule J., Cody G., ten Kate I., Buxbaum K., Borg L., Symes S., Beaty D., Pilcher C., Meyer M., Conley C., Rummel J., Zurek R., and Crisp J. (2008). *Report of the joint NAI / MEPAG Mars Science Laboratory Caching Working Group*. Unpublished white paper, 17 p, posted Jan., 2008 by the Mars Exploration Program Analysis Group (MEPAG) at <http://mepag.jpl.nasa.gov/reports/index.html>. (1 citation)
4. Laan E., Leeuwis H., **ten Kate I. L.**, Boom E. (2006) The Life Marker Chip onboard the ExoMars Rover. *4th Interplanetary Probe Workshop*. CD-ROM (1 citation)
3. **ten Kate I. L.**, Garry J. R. C., Peeters Z., Foing B. H., Ehrenfreund P. (2006) Amino acid destruction in the martian surface environment (abstract #2397). *37th Lunar and Planetary Science Conference*. CD-ROM
2. Garry J. R. C., **ten Kate I. L.**, Ruitkamp R., Peeters Z., Lehmann B., Foing B. H., and Ehrenfreund P. (2004) Amino acid survival under ambient martian surface UV lighting (abstract #1686). *35th Lunar and Planetary Science Conference*. CD-ROM
1. **ten Kate I. L.**, Ruitkamp R., Botta O., Lehmann B., Gomez Hernandez C., Boudin N., Foing B. H., and Ehrenfreund P. (2003) Simulations of martian surface and subsurface processes. (abstract #1313). *34th Lunar and Planetary Science Conference*. CD-ROM

Inge Loes ten Kate - public outreach

Television

- 2013
 - Interview "Curiosity één jaar op Mars". Tijd voor Max
 - "De Wereld Leert Door", VARA
- 2012
 - TV interviews about the Curiosity landing
 - NOS:
 - SBS6: Hart van Nederland,
 - RTV Utrecht: 6 o'clock news,
 - WNL: Half 8 live (Nederland 3)
- 2006
 - TV interview RTL nieuws, prime time news "Life on Mars"

Radio

- 2013
 - Radio interview "Russian Meteorite" Met Het Oog op Morgen, NOS
- 2012
 - Radio interview "Is er leven op Mars?" Tros Nieuwsshow, Radio 1
 - Radio interviews about the Curiosity landing: Met het Oog op Morgen radio 1, RTV Utrecht, NOS radio 1 (voor en na landing), VARA radio 2, KRO radio 4, Omroep MAX radio 2, NOS Studio Sport zomer radio 1, Q-Music, Radio 538.
 - Radio interview "Marsmissie. Hoe?Zo! Wetenschap, NTR
- 2011
 - Radio interview about Curiosity launch in "Met het oog op morgen". NOS
 - Radio interview "Aliens uit Sterrenstof". Hoe?Zo! Radio, NTR
- 2010
 - Roundtable discussion on "Life on Mars", Labyrint Science Radio, VPRO
- 2006
 - Radio interview Business News Radio, "Life on Mars"
 - Radio interview Noorderlicht, VPRO, "Are we alone in the Universe"
- 2003
 - Radio interview Radio 1, "Life on Mars and the Beagle 2 landing"
 - Radio interview Radio Nederland Wereldomroep, "Life on Mars"

Internet

- 2013
 - NOS.nl interview "Marswagen tot mei buiten bereik"
 - blog NOS.nl: <http://weblogs.nos.nl/binnenlandredactie/category/curiosity-op-mars/>
- 2012
 - NOS.nl interview about the Curiosity landing

Printed media

- 2012
 - "Nog steeds geen leven op Mars", De Volkskrant Wetenschap
 - Interview in ESTA, magazine for higher educated women "Wiskundemeisje" (Science girls)
 - News paper articles on Curiosity landing on Mars: De Volkskrant, Eindhovens Dagblad, Dagblad Tubantia, Nieuwsblad van het Noorden, BN/De Stem, De Telegraaf, Algemeen Dagblad, NOS.nl, Algemeen Dagblad, Het Nieuwsblad, DUB (UU), De Telegraaf
- 2011
 - Interview about Curiosity, the SAM instrument suite for "Kijk". Dutch popular science magazine
 - Interview about Curiosity, the SAM instrument suite for "Quest". Dutch popular science magazine
- 2007
 - Interview "Hydrogen peroxide based life on Mars", Intermediair magazine

Lectures and events

- 2013
 - Lecture "Curiosity één jaar op Mars!" Nederlands Ruimtevaart Museum / Aviodrome, Lelystad
 - Lecture "Leven op Mars" Festival de Beschaving, Utrecht
 - Lecture "Mars door de ogen van Curiosity" for Sterrenkundig Gezelschap Minneart, Sonnenborgh, Utrecht
 - Lecture and debate "Het belang van onderzoek naar organische stoffen op Mars". Science Café Utrecht University Museum / Studium Generale.
 - Lecture "Curiosity on Mars" Nederlandse Vereniging voor Weer en Sterrenkunde, Arnhem

- Lecture "Curiosity on Mars" Science Café Leiden
- 2012
 - Lightning talk: 20PK at Discovery Festival in NEMO Amsterdam
 - Lecture "Hoe zoeken we naar water en leven op Mars" at the Koninklijke Nederlandse Akademie van de Wetenschappen symposium "Een nieuwe stap in de speurtocht naar buitenaards leven"
- 2011
 - Lecture: "Voorwaarts Mars". Highschool 't Assink, Haaksbergen
 - Lecture "Op naar Mars". Elementary School De Regenboog, Velthoven
 - Lecture "Intelligent buitenaards leven?", Het Nutshuis, Den Haag
- 2009
 - Goddard Center for Astrobiology event Appalachian Nation Cherokee Pow Wow, Sterling, VA, USA
- 2007
 - Middle School Course: "So, you want to be a rocket scientist?", , Goddard Space Flight Center, USA
- 2006
 - Family Day "Are we alone in the Universe", National Air and Space Museum, Washington, DC, USA
- 2005
 - Lecture "Mars", Old Observatory, Leiden University
- 2003
 - Science day, Leiden University, children's workshop on "Living on Mars"
- 2002
 - Lecture "Complex Organics on Mars", Second European Mars Society Convention, Rotterdam
- 2001
 - Participation in Space Day 2001, representing the Lunar Explorers Society, Space Expo, Noordwijk