

Curriculum Vitae

Prof. Dr. Antje Boetius

Professor of Geomicrobiology at the University of Bremen

Leader of the Helmholtz-Max Planck Research Group on Deep Sea Ecology and Technology

<i>Date of Birth</i>	05.03.1967	
<i>Nationality</i>	German	
<i>Business Address</i>	Leader of the HGF-MPG Research Group on Deep Sea Ecology and Technology Alfred Wegener Institute, Helmholtz Center for Marine and Polar Research Am Handelshafen 12, D-27515 Bremerhaven Email: antje.boetius@awi.de Phone: +49 (0)175 2475301 Vice Director of the Excellence Cluster MARUM Center for Marine Environmental Sciences University of Bremen 28359 Bremen Postal: Max Planck Institute for Marine Microbiology Celsiusstr. 1, D-28359 Bremen Phone: +49 (0)421 2028-860, Fax: +49 (0) 421 2028-690	
<i>Private Address</i>	Osterdeich 74, D-28205 Bremen Phone: +49 (0)421 7941503	
<i>University Education</i>	1993 - 1996	University of Bremen, Bremen, Germany Doctorate in Biology
	1986 - 1992	University of Hamburg, Hamburg, Germany Diplom in Biology
<i>Academic Career</i>	Since November 2012	Vice Director of the MARUM Cluster of Excellence, University of Bremen
	Since May 2010	External Scientific Member of the Max Planck Society
	Since March 2009	Professor of Geomicrobiology, University of Bremen
	Since December 2008	Leader of the HGF-MPG Joint Research Group on Deep Sea Ecology and Technology, AWI
	June 2008 - Dec 2008	Full Professor for Microbiology Jacobs University Bremen
	Since Nov 2003	Leader of the "Microbial habitat" group, MPI Bremen <i>Research on biogeochemistry, transport processes and microbial processes in benthic environments</i>
	Sep 2003 - June 2008	Associate Professor of Microbiology, Jacobs University Bremen
	Sep 2001 - Sep 2003	Assistant Professor of Microbiology, International University Bremen <i>Teaching in biology (major and non-major) and transdisciplinary university study courses</i>

	Feb 2001 - Oct 2003	AWI for Polar and Marine Research, Bremerhaven <i>Permanent research faculty, coordination of national and international projects on microbial turnover of methane above marine gas hydrate and at cold seeps</i>
	1999 - 2001	Max Planck Institute for Marine Microbiology, Bremen <i>Research associate (Postdoc), since 2001 guest researcher</i>
	1996 - 1999	Institute for Baltic Sea Research, Warnemünde <i>Research associate (Postdoc)</i>
	1993 - 1996	AWI for Polar and Marine Research, Bremerhaven <i>Research associate (PhD)</i>
	1990 - 1992	Institute for Hydrobiology and Fishery Res., Hamburg <i>Lab assistant (student contracts)</i>
	1989 - 1990	Scripps Inst. of Oceanography, San Diego, CA <i>Lab assistant</i>
<i>International Experience</i>	2004	Invited Professor of the University Pierre et Marie Curie (Paris 6)
	1989 – 1991	Graduate School of Scripps Institution of Oceanography, Academic exchange program with UCSD, La Jolla, California, USA
<i>Honors/Awards/Stipends</i>		<ul style="list-style-type: none"> ▪ 2017 Copernicus Medal ▪ 2017 Gauss Medal, Braunschweigische Wissenschaftliche Gesellschaft ▪ 2016 Elected Member of the European Academy of Sciences ▪ 2016 Endowed Biogeochemistry Lecture of the Geochemical Society ▪ 2016 Teaching Award MARMIC ▪ 2015 Elected Member of the EAM – European Academy of Microbiology ▪ 2015 Fellow of the American Academy of Microbiology ▪ 2014 Teaching Award MARMIC ▪ 2014 Excellence Professorship of the Prof.-Dr.-Werner-Petersen-Foundation ▪ 2014 David Packard Distinguished Lecturer (MBARI) ▪ 2014 Gustav-Steinmann-Medal of the Geological Union e.V. Germany ▪ 2014 Elected Fellow of the American Geophysical Union AGU ▪ 2014 Elected EMBO member ▪ 2014 Hector Fellowship ▪ 2013 Teaching Award MARMIC ▪ 2013 ECI Ecology Prize ▪ 2012 Heinrich-Hertz- Guest Professor KIT ▪ 2011 European Research Council Advanced Investigator Grant “Abyss” ▪ 2011 Elected Member of the Academy of Sciences and Literature Mainz ▪ 2010 Member of the German Science Council ▪ 2010 External Scientific Member of the Max Planck Society ▪ 2009 Distinguished Professor of the Jacobs University ▪ 2009 Elected Member of the National Academy Leopoldina (Section Geology) ▪ 2009 Gottfried-Wilhelm-Leibniz Prize of the DFG ▪ 2007 Teaching Award MARMIC ▪ 2006 Teaching Award MARMIC ▪ 2006 Medaille de la Societe d’Oceanographie de France ▪ 2005 Teaching Award MARMIC ▪ 2004 Invited Professor University Pierre et Marie Curie (Paris 6)

- 2000 FEMS Young Scientist Award for the participation in the 7th EMMS
- 1999 FEMS Young Scientist Award for the participation in the conference “Enzymes in the Environment“
- 1999 DFG Stipend for the participation in the 9th Goldschmidt Conference
- 1998 DFG Stipend for the participation in the Gordon Research Conference on Polar Marine Science
- 1997 EU Stipend for the participation in DIALOG II
- 1991 IAESTE Stipend of the DAAD
- 1986 - 1989 Stipend of the “Studienstiftung des Deutschen Volkes“

Research

Special fields of expertise:

Marine microbial ecology
 Polar Sea ecology; Effects of sea-ice retreat
 Seafloor biogeochemistry
 Chemosynthetic and extreme environments
 Ocean carbon cycle
 Microbial processes of early diagenesis in deep-sea sediments
 Deep Sea environmental impacts

Additional fields of interest:

Biodiversity
 General Microbial Ecology
 Microbial symbiosis
 Deep-sea ecology
 Marine carbon cycle

Current funding:

2014 - 2020 FRAM Frontiers in Arctic Marine Monitoring
 – HGF Research Infrastructure
 2015 – 2017 JPI Oceans Ecological Aspects of Deep Sea Mining
 2015 - 2019 7FP EU project AtlantOS ocean observation
 2014 - 2018 7FP EU project FIXO3 Fixed point observatories
 2014 - 2017 7FP EU project MIDAS
 2013 - 2018 HGF Alliance ROBEX
 2012 - 2018 ERC Advanced Grant Abyss
 2009 - 2018 DFG Leibniz Program
 2009 - 2017 MARUM Excellence Cluster

Previous projects:

2012 - 2016 7FP EU project MicroB3
 2011 - 2014 7FP EU project ECO2
 2009 - 2012 7 FP EU project EUROFLEETS
 2007 - 2012 Graduate School of the Excellence Initiative “GLOMAR”
 2009 - 2012 Marie Curie Action "Initial Training Networks" – ITN SenseNet
 2009 - 2012 7 FP EU project HERMIONE (WP leader)
 2009 - 2015 BMBF project BIOACID
 2009 - 2012 7 FP EU project HYPOX (coordinator)
 2007 - 2011 EU 6th FP NoE ESONET
 2009 - 2010 DFG MERIAN expedition HOMER 1 + 22006-2010 ESF EUROCORES EuroDiversity “MicroSystems”
 2007 – 2010 ESF EUROCORES EuroDeep “Chemeco” 2006-2010 CNRS GDRE DIWOOD (Collaboration Univ. Pierre et Marie Curie, CNRS, MPI)
 2005 – 2009 DFG Research Center RCOM II, Fluid and gas seepage along continental margins: structures, processes and budgets

- 2005 – 2009 EU 6th FP IP HERMES “Hotspot ecosystem research on margins of Europe’s seas”
- 2008 DFG METEOR expedition Guineco 2007 DFG METEOR expedition MICROHAB (M72/2)
- 2007 DFG METEOR expedition BIONIL (M70/2)
- 2006 DFG METEOR proposal BIONIL (M70/2) 2005-2008 BMBF project MUMM “Microbial turnover of methane above marine gas hydrate”
- 2003 - 2007 ESF project “MEDIFLUX - An integrated study of fluid seepage through the seabed of the Nile deep-sea fan “
- 2003 - 2006 6th FP EU project STREP “EXOCET – Extreme ecosystem studies in the deep Ocean: technological developments “
- 2004 - 2005 DAAD-ICCTI Projektbezogener Personenaustausch mit Portugal (PPP)
Acções Integradas Luso-Alemãs
- 2002 - 2005 5th FP EU project “METROL – Methane fluxes in ocean margin sediments: microbiological and geochemical control “
- 2002 - 2005 DFG/ODP project „Analysis of the distribution and diversity of methanotrophic microbial consortia at Hydrate Ridge (Cascadia Margin, Offshore Oregon; ODP Leg 204 in 2002)
- 2000 - 2003 BMBF project MUMM “Microbial turnover of methane above marine gas hydrate”
- 1999 - 2000 BMBF project BIGSET II “Biogeochemical transport of matter and energy in the deep-sea”
- 1999 - 2000 DFG project “Pressure sensitivity of microbial processes in deep-sea sediments”

Previous Participation in research programs:

- 2000 NSF Life in Extreme Environments (Collaboration Univ. Georgia)
- 1999 - 2000 BMBF projects TECFLUX I+II “Tectonically induced material fluxes”, NE Pacific (GEOMAR, Kiel)
- 1997 - 1998 EU ENRICH program ADEPD “Atlantic data base for exchange processes at the deep-sea floor” (Baltic Sea Research Institute Warnemünde)
- 1996 - 1998 BMBF project BIGSET I “Biogeochemical transport of matter and energy in the deep-sea” (Baltic Sea Research Institute Warnemünde)
- 1993 - 1995 Project ARCTIC, Laptev Sea (AWI)
- 1993 BMBF project TIEFMI, Eastern Mediterranean (Institute for Hydrobiology, Hamburg)

National Collaborations

- IfM-GEOMAR, Kiel (P. Linke, M. Haeckel, K. Wallmann)
- MARUM (G. Bohrmann, K.-U. Hinrichs, W. Bach)
- Deutsches Zentrum für Marine Biodiversitätsforschung (P. Martinez Arbizu)
- MPI Göttingen (D Riedel)

International Collaborations

- University of Tromsø (J. Mienert, P. Wassmann)
- University of Georgia, USA (S. Joye)
- University of North Carolina, Chapel Hill, USA (C. Arnosti, A. Teske)
- Jamstec (F. Inagaki)
- WHOI (C. German)
- MBL Woods Hole, US (M. Sogin)
- IORAS (A. Gebruk)

Current Graduate Students

Eduard Fadeev (Dr., FB5, MARMIC 2015-2019)
Rafael Perez (Dr., FB5, MARMIC 2015-2018)
Ralf Hoffmann (Dr., FB5, POLMAR 2014-2017)
Josefine Rapp (Dr., FB2, MARMIC 2014-2017)
Katy Hoffmann (Dr., FB2, MARMIC 2013-2016)

Previous Graduate Students

Tobias Vonnahme (MSc, FB2, MARMIC 2015-2016)
Christiane Hassenrück (Dr., FB2 2013-2016)
Thorben Wulff (Dr. FB5, University of Bremen 2009 - 2015)
Viola Krukenberg (Dr., FB2, MARMIC 2012 - 2015)
Gerhard Jessen (Dr., FB5, MARMIC 2011 - 2015)
Renate Degen (PhD, FB2, University of Bremen, POLMAR 2012 - 2014)
Mar Fernandez (PhD, FB2, University of Bremen, MARMIC 2011 - 2014)
Marianne Jacob (Dr., POLMAR 2009 - 2014)
Josefine Rapp (MSc, FB2, MARMIC 2013-2014)
Daphne Donis (Dr. FB2, University of Bremen 2010 - 2013)
Emil Ruff (Dr. FB2, University of Bremen 2010 - 2013)
Boyan Angelov (Master, MARMIC, University of Bremen 2012 - 2013)
Judith Ufkes (PhD, GLOMAR, University of Bremen 2008 - 2012)
Petra Pop Ristova (Dr., MARMIC 2009 - 2012)
Mar Fernandez (Master, MARMIC, University of Bremen 2010 - 2011)
Christina Bienhold (Dr., University of Bremen 2007 - 2011)
Viola Krukenberg (Master, MARMIC, University of Bremen 2010 - 2011)
Angelique Gobet (PhD, MARMIC, JUB 2006 - 2010)
Sandra Schöttner (MARMIC Master, 2006; PhD, JUB 2007 - 2010)
Björn Sonntag (Master, University of Bremen 2010)
Emil Ruff (M. S. University of Stuttgart 2009 - 2010)
Stefanie Grünke (Dr., University of Bremen 2006 - 2010)
Janine Felden (PhD MARMIC, JUB 2005 - 2009)
Jan Fischer (Dr., University of Bremen 2005 - 2009)
Petra Pop Ristova (Master, MARMIC 2008 - 2009)
Marianne Jacob (Master, MARMIC 2008 - 2009)
Judith Ufkes (Dipl., University of Bremen 2008)
Simone Boer (Dr., University of Bremen 2004 - 2008)
Gunter Wegener (Dr., University of Bremen 2004 - 2008)
Alexandra Meziti (Master, MARMIC, IUB 2006 - 2007)
Enoma Omoregie (PhD, MARMIC, IUB 2004 - 2007)
Tina Lösekann (Dipl., Univ. of Bremen 2001, Dr., Univ. of Bremen 2002-2006)
Helge Niemann (Dr., University of Bremen 2002-2005)
Janine Felden (Master, MARMIC 2004-2005)
Rita Dunker (Master, MARMIC 2004-2005)
Maya Shovitri (Master, MARMIC 2004-2005)
Tina Treude (Dr., University of Bremen 2000-2003)
Heiko Löbner (Dipl., University of Bremen 2003)

Teaching

- Lecture "Molecular Geobiology", Master of Geoscience, University of Bremen
- Lecture "Biology for Geoscientists", Bachelor of Geoscience, University of Bremen
- Lecture "Astrobiology" Master of Geoscience, University of Bremen
- Lecture "Geobiology", Bachelor of Geoscience, University of Bremen
- Lecture and courses for Graduates in Microbial Oceanography and Geomicrobiology

(IMPRS MARMIC)

- 2007 Austral Summer Institute VII, Chile, ENERO 2007
- 2004 Participation in lecture series „Evolution de la vie“ and „Microbiologie Generale“, University Paris 6, 2004
- 2001-2008 Lectures for Undergraduates in General Biology, Microbiology, Evolutionary Biology, and transdisciplinary „University Study Courses“ (team-taught with instructors from Humanities and Social Sciences) (International University Bremen/Jacobs University Bremen)
- 1992-1996 Lectures for Graduates in Deep-Sea Ecology (University of Hamburg) and Biogeochemistry (University of Bremen)
- Undergraduate Courses in Biological Oceanography (University of Rostock)
- Laboratory Courses for scholars, undergraduates, graduates and technicians in Microbiology, Biogeochemistry, Microbial ecology (University of Rostock and MPI)

*Current
Professional
Memberships and
Committees*

- Head of the Commission “Wissenschaft im Dialog”
- Advisory Board “Haus der Zukunft” Science Museum Berlin
- Senate of the DFG
- Senate of the Leibniz Association
- American Society of Microbiology, General Meeting Planning Committee
- Goldschmidt Officer, Council of European Association of Geochemistry
- Patterson Award Committee, Geochemical Society
- Executive Committee OceanSites
- Advisory Board CAGE, Excellence Centre for Arctic Gas Hydrate, Environment and Climate (Tromso, Norway)
- Scientific Steering Committee Deep Life Directorate of the Deep Carbon Observatory (Sloan Foundation, Carnegie USA)
- Scientific Advisory Board University of Copenhagen, Biology Department
- Commission on Biodiversity of the DFG Senate
- Advisory Board National History Museum Berlin
- Advisory Board Senckenberg Museum
- Advisory Board Robert-Bosch-Foundation/Leopoldina Journalist College “Tauchgänge in die Wissenschaft”
- Academia Net (<http://www.academia-net.de/alias/Profil/Prof-Dr-Antje-Boetius/1028143>)
- Advisory Board Diversitas D
- Membership European Geosciences Union
- Membership American Geophysical Union
- Membership American Society of Microbiology
- Membership American Society for Limnology and Oceanography
- Membership VAAM/FEMS
- Membership International Society for Microbial Ecology

Editorial Services

- Senior Editor of the ISME Journal (IF 9.3)
- Editorial Boards of Applied and Environmental Microbiology, Geobiology, Aquatic Microbial Ecology, Marine Biology Research (new journal, previously SARSIA and OPHELIA), Environmental Microbiology
- Reviewer for Journals: Science, Nature, ISME, Nature Geoscience, MEPS, Limnology and Oceanography, Deep Sea Research I + II, Marine Biology, Marine Geology, Progress in Oceanography, Journal of Sea Research, Organic Geochemistry, AEM, Microbial Ecology, Springer Verlag,
- Reviewer for funding agencies: DFG, BMBF, ERC, NSF, NOAA, NWO, NERC, ANR, CNRS, SNSF, FWO, Sloan Foundation

Past Professional
Services

- Science Council of Germany (Wissenschaftsrat) 2010 – 2016; 2014-2016 as Chair of the Scientific Commission
- ERC Starting Grant Panel LS8
- ASLO Award Committee, Chair of Lindeman Award Committee
- National Committee for Global Change Research
- EGU Biogeosciences Division Vice-Chair
- Advisory Board "C-DEBI" Center for Dark Biosphere (NSF Science and Technology Center, USC LA, USA)
- Advisory Board Institute for Polar Research IPEV (France)
- Advisory Board Center of Geobiology, Bergen, Norway
- Science Committee NIOZ
- Head of the Advisory Board of the Institute for Baltic Sea Research (Leibniz)
- Advisory Board GeoBioCenter Munich (LMU)
- Advisory Board of the Excellence Cluster "Future Ocean" University Kiel
- Commission for Oceanography of the DFG Senate
- Champion of the Monaco Blue Initiative (Prince Albert II of Monaco Foundation)
- Head of the Scientific Committee of the Annette-Barthelt-Price for Marine Research
- Advisory board "International Census of Marine Microbial Life" ICOMM
- Steering Committee ChEss (Biogeography of Chemosynthetic Ecosystems), Census of Marine Life
- Scientific Council of CNRS Section „Planete et Universe“ (France)
- Scientific Committee of IFREMER (France)
- Scientific Committee DIVERSITAS International (UNESCO, ESSP)
- Editorial Board of Biogeosciences

Citation Report

Citation Report, <http://www.researcherid.com/rid/D-5459-2013>

Web of Science publication index January 2017: 174 items; H index 50

Google Scholar: citations 14060, H index 61, i10 index 133

Selected publications:

- Boetius, A., K. Ravenschlag, C. Schubert, D. Rickert, , F. Widdel, A. Gieseke, R. Amann, B. B. Jørgensen, U. Witte, O. Pfannkuche, (2000) A marine microbial consortium apparently mediating anaerobic oxidation of methane. **Nature** 407, 623 - 626.
- Michaelis W, Seifert R, Nauhaus K, Treude T, Thiel V, Blumenberg M, Knittel K, Gieseke A, Peterknecht K, Pape T, Boetius A, Amann R, Jorgensen BB, Widdel F, Peckmann J, Pimenov NV, Gulin MB (2002) Microbial Reefs in the Black Sea Fueled by Anaerobic Oxidation of Methane, **Science** 297, 1013-1015
- Niemann, H., T. Lösekann, D. de Beer, M. Elvert, T. Nadalig, K. Knittel, R. Amann, E. J. Sauter, M. Schlüter, M. Klages, J. P. Foucher, A. Boetius, (2006) Novel microbial communities of the Haakon Mosby mud volcano and their role as methane sink. **Nature**, (443) 854 – 858.
- Inagaki F, Kuypers MM, Tsunogai U, Ishibashi J, Nakamura K, Treude T, Ohkubo S, Nakaseama M, Gena K, Chiba H, Hirayama H, Nunoura T, Takai K, Jørgensen BB, Horikoshi K, Boetius A (2006) Microbial community in a sediment-hosted CO₂ lake of the southern Okinawa Trough hydrothermal system. **PNAS** 103 (38), 13899-13900
- Jørgensen BB, A Boetius (2007) Feast and famine—microbial life in the deep-sea bed. **Nature Reviews Microbiology**, 5 (10), 770-781.
- Knittel K, Boetius A (2009). The anaerobic oxidation of methane - progress with an unknown process. **Annual Reviews of Microbiology** 63:311–34
- Boetius, A., S. Albrecht, K. Bakker, C. Bienhold, J. Felden, M. Fernández-Méndez, S. Hendricks, C. Katlein, C. Lalande, T. Krumpfen, M. Nicolaus, I. Peeken, B. Rabe, A. Rogacheva, E. Rybakova, R. Somavilla, F. Wenzhöfer and the RV Polarstern ARK27-3-

Shipboard Science Party, 2013. Massive export of algal biomass from the melting Arctic sea ice. **Science**, 339, 1430

Boetius, A., F. Wenzhöfer, 2013. Seafloor oxygen consumption fuelled by methane from cold seeps. **Nature Geoscience**, doi:10.1038/ngeo1926.

Ruff, S. E; J Biddle, A Teske, K Knittel, A Boetius, A Ramette, 2015. Global dispersion and local diversification of the methane seep microbiome, **PNAS** 112(13), 4015-4020

Boetius A, AM Anesio, JW Deming, JA Mikucki, JZ Rapp, 2015. Microbial ecology of the cryosphere: sea ice and glacial habitats. **Nature Reviews Microbiology** 13, 677–690

Wegener, G, V Krukenberg, D Riedel, HE Tegetmeyer, A Boetius, 2015. Intercellular wiring enables electron transfer between methanotrophic archaea and bacteria. **Nature** 526 (7574), 587-590

Field Work (own participation, *chief scientist)

<i>Ships</i>	<i>Area</i>	<i>in situ instruments</i>
*2016 Polarstern PS101.....	Central Arctic.....	OFOBS, NUI HROV
*2015 FS SONNE SO242/2.....	South Pacific.....	OFOBS, ROV KIEL 6000
*2014 FS POLARSTERN PS86.....	Central Arctic.....	OFOBS, NUI HROV
2013 FS POLARSTERN ANT29-8	Southern Ocean...	OFOBS
*2012 FS POLARSTERN ARK27-3.....	Central Arctic	under-ice lander systems, OFOS
2011 FS POLARSTERN ARK26-3.....	Central Arctic	ice-teathered buoys
*2010 FS MERIAN 16/2	Barents Sea	AUV Sentry/ROV Genesis
*2010 FS MERIAN 15/1	Black Sea	JAGO/MOVE
*2009 FS MERIAN 13/3 and 4	Eastern Med.....	ROV QUEST/AUV
2009 FS Polarstern ARK 24/2	Nordic margin	ROV QUEST/AUV
*2008 FS METEOR 76/3b.....	Congo, Angola.....	ROV QUEST
2008 FS SONNE 169	Okinawa Trough ..	ROV QUEST
2007 RV Pourquoi Pas?.....	Eastern Med.....	ROV VICTOR 6000
*2007 RV METEOR 72/2	Black Sea	ROV QUEST/AUV Asterx
*2006 RV METEOR 70/2	Eastern Med.....	ROV QUEST/AUV Asterx
2006 RV Pourquoi pas?.....	Barents Sea	ROV VICTOR 6000
2006 FS METEOR 68/2	Golf v Mexico	ROV QUEST
*2005 FS Alkor 267 (EXOCET).....	North Sea	ROV Cherokee, MOVE
2005 RV Point Lobos	Catalina Basin.....	ROV Tiburon
*2004 FS HEINCKE 208 (METROL)	North Sea	
2003 RV ATALANTE (Nautinil)	E Mediterranean .	(submarine NAUTILE)
2003 RV POLARSTERN ARK XIX/3b	Barents Sea	(ROV VICTOR 6000, lander)
*2002 RV HEINCKE 180 (METROL)	North Sea	(lander)
*2002 RV HEINCKE 169 (METROL)	North Sea	(ROV AWI)
2001 RV ATALANTE (HMMV)	N-Atlantic	(ROV VICTOR 6000)
2001 RV SEWARD JOHNSON (LexEn)	Gulf of Mexico	(submarine JOHNSON SEALINK)
2000 FS SONNE 148/1 (TECFLUXII)	NE-Pacific.....	(ROV ROPOS, lander)
2000 FS POSEIDON 260-5 (BIGSET II).....	NE-Atlantic	(lander)
2000 FS POSEIDON 260-3 (BIGSET II).....	NE-Atlantic	(lander)
1999 FS SONNE 143/2 (TECFLUX I)	NE-Pacific.....	(lander)
1999 FS METEOR 46/2 (SFB 261)	S-Atlantic	(lander)
1998 FS METEOR 42/2 (BIGSET)	NE-Atlantic	(lander)
1998 FS SONNE 129 (BIGSET).....	Arabian Sea	(lander)
1997 FS SONNE 118 (BIGSET).....	Arabian Sea	(lander)
1996 FS METEOR 36/6 (BIGSET)	NE-Atlantic	(lander)
1995 FS METEOR 33/1 (pre-study BIGSET) .	Indian Ocean	(lander)
1995 FS METEOR 31/3 (pre-study BIGSET) .	Arabian Sea	

1993 FS METEOR 25/1 (TIEFMI)..... E Mediterranean
 1993 FS POLARSTERN ARK IX/4 Laptev Sea
 1992 FS METEOR 21/6 (BIO-C-FLUX) NE-Atlantic (lander)
 1992 FS METEOR 21/1 (BIO-C-FLUX) NE-Atlantic (lander)
 1992 FS SONNE 77 (DISCOL)..... S-Pacific
 1991 FS GAUSS (PRISMA) North Sea
 1991 RV VICKERS/NADIR (HERO)..... E Pacific..... (submarine NAUTILE)
 1990 RV NEW HORIZON (QUAGMIRE)..... Equatorial Pacific
 1989 RV MOANA WAVE (BEPRA I) Equatorial Pacific
 1989 FS METEOR 10/4 (BIO-C-FLUX) NE-Atlantic (lander)

*Exemplary Invited
 Talks or Session
 Chair (2010-2016)*

- 2016 Goldschmidt Conference, Endowed Biogeochemistry lecture 2016
- 2016 ASM plenary session chair "Microbiology of the Anthropocene"
- 2016 EGU plenary talk (Active Planet Invited Lectures) "The active outer shell of Earth: What remains to be explored in carbon and life interactions?"
- 2016 Ocean Sciences plenary talk "At the interface of ocean sciences and society: Ecological aspects of deep-sea mining"
- 2015 Goldschmidt Conference, Invited lectures "Redox Gradients in Deep-Sea Sediments and Associated Microbial Communities" and "Anniversary Theme 06: 25 Years of Geobiology – Zooming in on Planet Earth's Microbes"
- 2015 ASM Outreach Talk "Deep Space, Ocean Life and Us", Audubon Aquarium; and Session Chair "Oceans alive - Marine microbes in action"
- 2015 Gordon Research Conference "Polar Seas"; Session Chair "Ecosystem Dynamics of Arctic Shelves"
- 2014 ISME plenary session chair "Microbiomes of marine ecosystems: key functions from the cryosphere to the deep biosphere and talk "From surface to bottom: patterns of the marine bacterial microbiome related to environmental change"
- 2014 ASM plenary session chair "Global Change Microbiology: Anthropogenic Pressures and Microbial Responses" and talk "Walking Thin Ice: Microbial Feedback Mechanisms from a Shrinking Cryosphere"
- 2013 FEMS Plenary lecture "The Microbes who came in from the cold"
- 2013 Gordon Research Conference on Geobiology "Anaerobic oxidation of methane"
- 2012 Gordon Research Conference on Marine Microbes Session Chair "Life in Extreme Environments"
- 2012 Jacques Monod Conference "From the shoreline to the abyss - Scales of microbial biodiversity in marine sediments"
- 2012 ASM Session and lecture "Enviably microbial powers"
- 2011 FEMS Geneva 4th congress, session and talk "Environmental prokaryotes shaping global C and N cycles"
- 2011 VAAM opening talk "Microbial consumption of hydrocarbons in the deep sea: From methane seeps to oil spills"
- 2011 ASM 111th Gen. Meeting, Session "Marine Biogeochemistry: Limitations and Optimizations of Microbial Powers"
- 2011 Darwin Day (Darwin Center Netherlands) invited lecture "Biodiversity patterns of microorganisms in the sea: from a teaspoon of mud to the global ocean and back"
- 2010 ISME general meeting, Session "Life in the cold: ecological interactions and biogeochemical roles of polar microbial communities"
- 2010 ASM 110th Gen. Meeting, Session "Microbes in a Changing World"
- 2010 ASM 110th Gen. Meeting, Opening "Technology and Revolutions in Microbiology"

*Public Outreach
(Exemplary
Events
2010-2016)*

- 2016 Opening of the German Sciences Year “Oceans”
- 2016 Arte Television “5 Women 5 Oceans – Icy Deep Sea”
- 2015 ARD Alpha Television "Ratgeberin der Mächtigen. Die Nationale Akademie der Wissenschaften Leopoldina" (Interview A. Boetius)
- 2015 TV Alpha Forum "Wissen im Fluss" - Interview on Deep sea research and deep sea threats
- 2015 Zeit Chancen Artikel “Taucht nicht ab” (Gender in Academia)
- 2014 RBB Radiointerviews Polarstern - Arktiswoche
- 2014 XLAB Göttingen “Planet Tiefsee”
- 2014 Science Notes - Klimawandel
- 2013 ZDF TV Magazine Makro – Deep Sea Resources
- 2013 SWR Planet Wissen TV magazines on “Deep Sea”, “Ocean Resources”
- 2013 Interviews Brigitte, Freundin, Donna
- 2012 NDR TV talkshow
- 2012 TV Total
- 2012 MS Wissen – “Projekt Zukunft Erde” Symposium Arctic Change
- 2011 DAS! TV Magazine
- 2011 Book release “Das Dunkle Paradies”, several radio interviews
- 2011 Business Vogue Interview
- 2011 Studium Generalis lectures Uni Heidelberg, Würzburg, Marburg
- 2010 Television Magazines Quarks, Tigerentenclub, heute journal, Tagesschau
- 2010 DFG Exkurs lecture “The Abyss – Deep Sea Research today”