

SUNDAY, July 5, 2009 - ARRIVAL AND KEYNOTES

2:00 pm - 11:00 pm	Arrival and Check-in
6:00 pm	Dinner (90 min)
7:30 pm - 7:45 pm	Welcome by Conference Chair: Martin Klotz
7:45 pm - 9:30 pm	KEYNOTES
7:45 pm - 8:20 pm	Keynote Talk 1 (35 min) – Jim Prosser “The Consequences of Ammonia Oxidiser Diversity for Soil Ecosystem Function”
8:20 pm - 8:35 pm	Discussion (15 min)
8:35 pm - 9:10 pm	Keynote Talk 2 (35 min) – Alan Hooper “Oxidation of Hydroxylamine and Detoxification of N- or O-species in <i>Nitrosomonas</i> ”
9:10 pm - 9:30 pm	Discussion (15 min)

MONDAY, July 6, 2009 - SESSION A: (Assessment of) diversity & abundance of nitrifier communities and their contributions to nitrification, nitrifier denitrification and anammox processes – Ward

7:30 am - 8:30 am	Breakfast (60 min)
9:00 am - 12:30 pm	Diversity and abundance of nitrifier communities and their contributions to nitrification, nitrifier denitrification and anammox processes; Part I
9:00 am - 9:10 am	Discussion Leader (10 min): Bess <u>Ward</u> , Christa Schleper and Jim Prosser
9:10 am - 9:30 am	TALK 1 (20 min): Graeme Nicol “Nitrification in acid soils”
9:30 am - 9:40 am	Discussion (10 min)
9:40 am - 10:00 am	TALK 2 (20 min): Chris Francis “Linking the diversity and abundance of marine ammonia-oxidizing archaea to biogeochemical activity”
10:00 am - 10:10 am	Discussion (10 min)
10:10 am - 10:30 am	Coffee break (20 min)
10:30 am - 10:40 am	Poster Talk 1 (10 min): Veronica Molina “Ammonia oxidizing bacteria and crenarchaeota inhabiting the coastal area of central Chile and factors explaining their variability.”
10:40 am - 10:45 am	Discussion (5 min)
10:45 am - 11:05 am	TALK 3 (20 min): Gerhard Herndl “Latitudinal and depth-related trends in ammonia oxidizing bacteria and archaea in the Atlantic: nitrification rates and <i>amoA</i> abundance”
11:05 am - 11:15 am	Discussion (10 min)
11:15 am - 11:35 am	TALK 4 (20 min): Hongyue Dang “Ammonia-oxidizer community profiles as bio-tracers and bio-indicators in various marine environments”
11:35 am - 11:45 am	Discussion (10 min)
11:45 am - 11:55 am	Poster Talk 2 (10 min): Nicholas Bouskill “Temporal and spatial patterns in communities of ammonia-oxidizing prokaryotes across environmental gradients”
11:55 am - 12:00 pm	Discussion (5 min)
12:00 pm - 12:20 pm	TALK 5 (20 min): Bongkeun Song “Anaerobic ammonium oxidation in two different estuaries of North Carolina”
12:20 pm - 12:30 pm	Discussion (10 min)
12:30 pm	Lunch (60 min)
1:30 pm - 3:30 pm	Free Time or group meetings
3:30 pm - 4:00 pm	Group photo
4:00 pm - 6:00 pm	POSTER SESSION A
6:00 pm	Dinner (90 min)
7:30 pm - 9:40 pm	Diversity and abundance of nitrifier communities Part II
7:30 pm - 7:40 pm	Discussion Leader (10 min): Bess <u>Ward</u> , Christa Schleper and Jim Prosser
7:40 pm - 8:10 pm	TALK 6 (30 min): Andrew Yool “Modelling the role of nitrification in open-ocean productivity and the nitrogen cycle”
8:10 pm - 8:20 pm	Discussion (10 min)
8:20 pm - 8:50 pm	TALK 7 (30 min): Karen Casciotti “Using natural abundance stable isotopes to tease apart oxidative and reductive fates for nitrite in oxygen deficient zones”
8:50 pm - 9:00 pm	Discussion (10 min)
9:00 pm - 9:30 pm	TALK 8 (30 min): Lisa Stein “Towards a unified understanding of nitrification-linked denitrification”
9:30 pm - 9:40 pm	Discussion (10 min)

TUESDAY, July 7, 2009 - SECOND MAJOR TOPIC: Functional diversity in nitrifying organisms: response to stress and substrate availability, niche differentiation and evolution – Laanbroek

7:30 am - 8:30 am	Breakfast (60 min)
9:00 am - 12:30 pm	Functional diversity in nitrifying organisms, Part I: Response to stress & substrate availability and niche differentiation
9:00 am - 9:10 am	Discussion Leader (10 min): Riks <u>Laanbroek</u> and Eva Spieck
9:10 am - 9:30 am	TALK 1 (20 min): Jose de la Torre "The New Nitrogen Cycle: Insights from the Physiology, Genomics and Ecology of Ammonia-Oxidizing Archaea"
9:30 am - 9:40 am	Discussion (10 min)
9:40 am - 10:00 am	TALK 2 (20 min): Boran Kartal "Functional diversity of anaerobic ammonium oxidizing bacteria"
10:00 am - 10:10 am	Discussion (10 min)
10:10 am - 10:30 am	Coffee break (20 min)
10:30 am - 10:40 am	Poster Talk 1 (10 min): Annika Mosier "Niche specialization of ammonia-oxidizing archaea and bacteria in estuary sediments"
10:40 am - 10:45 am	Discussion (5 min)
10:45 am - 11:05 am	TALK 3 (20 min): Holger Daims " <i>In situ</i> diversity and niche adaptations of nitrite-oxidizing bacteria"
11:05 am - 11:15 am	Discussion (10 min)
11:15 am - 11:35 am	TALK 4 (20 min): Annette Bollmann "Ammonia oxidizers from freshwater sediments"
11:35 am - 11:45 am	Discussion (10 min)
11:45 am - 11:55 am	Poster Talk 2 (10 min): Willm Martens-Habbena "Obligate oligotrophic ammonia oxidation in mesophilic Crenarchaeota"
11:55 am - 12:00 pm	Discussion (5 min)
12:00 pm - 12:20 pm	TALK 5 (20 min): Sharon Avrahami "Effects of change in environmental conditions on the community structure of ammonia oxidizing bacteria and on their function"
12:20 pm - 12:30 pm	Discussion (10 min)
12:30 pm	Lunch (60 min)
1:30 pm - 4:00 pm	Free Time or group meetings
4:00 pm - 6:00 pm	POSTER SESSION –SECOND MAJOR TOPIC
6:00 pm	Dinner (90 min)
7:30 pm - 9:40 pm	Functional diversity in nitrifying organisms; Part II: Evolution and niche differentiation
7:30 pm - 7:40 pm	Discussion Leader (10 min): Chris Francis
7:40 pm - 8:10 pm	TALK 6 (30 min): Riks Laanbroek "The effect of plants on the community composition of betaproteobacterial ammonia-oxidizing bacteria"
8:10 pm - 8:20 pm	Discussion (10 min)
8:20 pm - 8:50 pm	TALK 7 (30 min): Eva Spieck "Effect of temperature and nitrite on the population of nitrite oxidizing bacteria"
8:50 pm - 9:00 pm	Discussion (10 min)
9:00 pm - 9:30 pm	TALK 8 (30 min): Martin Klotz "Evolution of the Nitrogen cycle – an ~omics perspective"
9:30 pm - 9:40 pm	Discussion (10 min)

WEDNESDAY, July 8, 2009 - THIRD MAJOR TOPIC: Evolution, genomics and biochemistry of ammonia and nitrite oxidation – Arp

7:30 am - 8:30 am	Breakfast (60 min)
9:00 am - 12:30 pm	Genomics and biochemistry of ammonia and nitrite oxidation
9:00 am - 9:15 am	Session Introduction (15 min) Chair: Dan Arp and Michi Wagner
9:15 am - 9:35 am	TALK 1 (20 min): Andrew Pacheco “Enzymatic interconversion of ammonia and nitrite: the right tool for the job”
9:35 am - 9:45 am	Discussion (10 min)
9:45 am - 10:05 am	TALK 2 (20 min): Jan Keltjens “Metabolism and biochemistry of anammox bacteria”
10:05 am - 10:15 am	Discussion (10 min)
10:15 am - 10:25 am	Poster Talk 1 (10 min): William Hickey “Quantitative proteomic analysis of <i>Nitrosomonas europaea</i> : Comparison of growing and energy-starved cells”
10:25 am - 10:30 am	Discussion (5 min)
10:30 am - 10:50 am	Coffee break (20 min)
10:50 am - 11:10 am	TALK 3 (20 min): David Stahl “Physiology and genomics of ammonia-oxidizing <i>Archaea</i> ”
11:10 am - 11:20 am	Discussion (10 min)
11:20 am - 11:40 am	TALK 4 (20 min): Michael Wagner “Exploring hidden key players in nitrification: Metagenomics and functional analysis of archaeal ammonia oxidizers and <i>Nitrospira</i> ”
11:40 am - 11:50 am	Discussion (10 min)
11:50 am - 12:00 am	Poster Talk 2 (10 min): Jeanette Norton “Genome Sequencing of <i>Nitrosomonas spp.</i> AL212; An Ammonia-Oxidizing Bacterium Adapted for Growth at Low Ammonia Concentrations”
12:00 am - 12:05 pm	Discussion (5 min)
12:05 pm - 12:25 pm	TALK 5 (20 min): Christa Schleper “(Meta-)genomics of archaea from soils and hot springs”
12:25 pm - 12:35 pm	Discussion (10 min)
12:35 pm	Lunch (60 min)
1:30 pm - 4:00 pm	Free Time or group meetings 2 - 3 PM <u>NitNet SC Meeting</u> (Election of NitNet SC) Arp (RCN SC chair)
4:00 pm - 6:00 pm	POSTER SESSION – THIRD MAJOR TOPIC
6:00 pm	Dinner (60 min)
7:00 pm - 8:00 pm	<u>Conference Business Meeting: Klotz (ICoN1 Chair)</u> (Discuss future meeting time & site & scheduling. Election of next ICoN2 location and ICoN2 chair; 2011. Candidate: Department of Microbiology, Radboud University, The Netherlands)
8:00 PM -	ON-SITE SOCIAL GATHERING

THURSDAY, July 9, 2009 – FORTH MAJOR TOPIC: Rates of nitrification in the environment, environmental controls on nitrification rates, applications in water and wastewater treatment – Norton

7:30 am - 8:30 am	Breakfast (60 min)
9:00 am - 12:30 pm	Controls on Nitrification Rates in the Environment
9:00 am - 9:10 am	Discussion Leader (10 min): Jenny Norton and Dave Myrold
9:10 am - 9:30 am	TALK 1 (20 min): Bess Ward "Magnitude and Distribution of Nitrification Rates in the Ocean in Relation to the Carbon Cycle."
9:30 am - 9:40 am	Discussion (10 min)
9:40 am - 10:00 am	TALK 2 (20 min): Satoshi Okabe "Structure, Function, and Eco-physiological Interactions among Community Members in Complex Multispecies Biofilms"
10:00 am - 10:10 am	Discussion (10 min)
10:10 am - 10:30 am	Coffee break (20 min)
10:30 am - 10:40 am	Poster Talk 1 (10 min): Ameet Pinto "Post-Stress recovery of a complex ammonia oxidizing bacterial community following heavy metal cadmium stress"
10:40 am - 10:45 am	Discussion (5 min)
10:45 am - 11:05 am	TALK 3 (20 min): Peter Bottomley "Factors that can influence the "per cell" rate of ammonia oxidation; the challenge of dissecting the microbiology behind soil nitrification"
11:05 am - 11:15 am	Discussion (10 min)
11:15 am - 11:35 am	TALK 4 (20 min): John Stark "Regulation of nitrification rates in terrestrial ecosystems"
11:35 am - 11:45 am	Discussion (10 min)
11:45 am - 11:55 am	Poster Talk 2 (10 min): Ines Mandic-Mulec "Nitrification in an acidic forest peat soil"
11:55 am - 12:00 pm	Discussion (5 min)
12:00 pm - 12:20 pm	TALK 5 (20 min) Brendan Bohannan "Response of Nitrifying Organisms to Simulated Global Change"
12:20 pm - 12:30 pm	Discussion (10 min)
12:30 pm	Lunch (60 min)
1:30 pm - 4:00 pm	Free time – group meetings
4:00 pm - 6:00 pm	POSTER SESSION – FORTH MAJOR TOPIC
6:00 pm	Dinner (60 min)
7:30 pm - 9:00 pm	NITRIFICATION PERSPECTIVES – Arp
7:30 pm - 9:00 pm	Round Table Discussion (90 min): Dan Arp will introduce the panel members and moderate a discussion of the panel with the audience.

FRIDAY, July 10, 2009

7:30 am - 8:30 am	Breakfast
9:00 am - 10:00 pm	Closure of ICoN1 and opening of the GS-ESI workshop
9:00 am - 9:30 am	Farewell Address: Klotz (ICoN1 Chair)
9:30 am - 10:00 am	Information on Nitrification Network GS-ESI Workshop (to start at 10:00 AM: Stein (Workshop advisor)