Energy, Resources & the Environment (ERE)

Division Meeting - 13 April 2018

Sonja Martens



Meetings | Publications | Outreach | www.egu.eu



How is the EGU run?

- Council is the highest decision-making body in EGU: Consists of the President, Vice President, General Secretary, Treasurer, Division Presidents and the Executive Secretary.
- EGU Executive: Consists of the President, Vice President, General Secretary, Treasurer, and Executive Secretary.
- EGU has eight Union-wide committees (Programme, Outreach, Publications...) reporting to Council.
- The EGU is a bottom up organization.





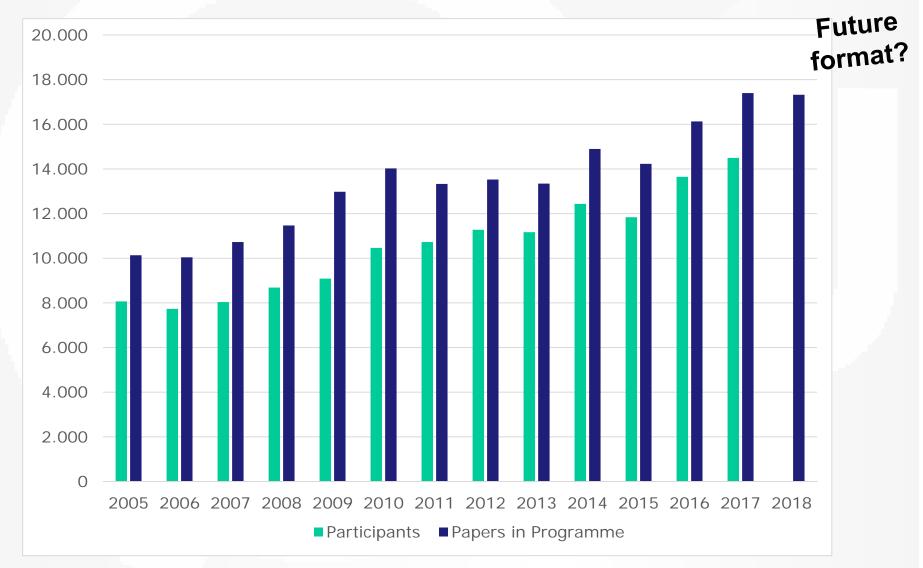
EGU General Assembly 2018 Facts

As of 5 April, the Assembly 2018 provides:

- 17,323 papers in programme | -0.44% (2017)
- 4,776 orals | 11,128 posters | 1,419 PICOs | ratio 28 / 64 / 8
- 12,733 registrations in advance | +12.37% (2017)
- 666 unique scientific sessions | 68 short courses | 294 side events
- 433 out of 666 scientific sessions are co-organized (65%)
- Original sessions: 1,355; 1,028 still active, 327 withdrawn



Papers in programme 2005-2018 and participants 2005-2017





EGU Communication Activities

EGU Today

- EGU Today is a daily newsletter highlighting interesting workshops and lectures during the GA
- Download at http://www.egu2018.eu/egu_today.html

Blogs

- GeoLog, the EGU Blog Network & EGU Division Blogs share great sessions, research, interviews and more throughout the Assembly
- Follow them at geolog.egu.eu and blogs.egu.eu

Social Media

- Sessions are advertised on Twitter (@EuroGeosciences) and Facebook (European Geosciences Union)
- Follow us on Instagram (@EuroGeosciences)
- Participants can ask questions & keep updated by following **#EGU18**

GeoLog

What's on for early career scientists at the Assembly in 2018







239 Beiträge 1.343 Abonnenten

European Geosciences Union Official account Tweet us at @eurogeosciences Read the lates eau.eu/6OXHFX







EGU's Open Access Journals

- Advantages of Open Access
- Immediate free access to the online article.
- Increased citation through unlimited access.
- Author retains copyright.
- EGU Journals are extremely successful with high impact.



http://www.egu.eu/publications/open-access-journals/



Aim of our division

- EGU brings together geoscientists covering all disciplines of the earth, planetary and space sciences (interdisciplinarity).
- We Energy, Resources and the Environment (ERE) bring together these scientists to …
- tackle challenges of the future: Provide adequate and reliable supplies of affordable energy and other resources, obtained in environmentally sustainable ways, which will be essential to economic prosperity, environmental quality and political stability around the world.





ERE Division Officers

- President/PG Chair: Sonja Martens
- Deputy President: Chris Juhlin
- Officer Publications: Michael Kühn
- Officer "above ground": Viktor Bruckman
- Officer Outreach & Education: Maria Ask
- Officer Economics & Integration: Kristen Mitchell
- Officer "subsurface": Suzanne Hangx
- ECS Representative: Luke Griffiths



Sonja Martens



Chris Juhlin



Michael Kühn



Viktor Bruckman



Maria Ask



Kristen Mitchell



Suzanne

Hangx



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Luke Griffiths

ECS Rep Candidate: Natalie Nakaten

Curriculum Vitae

PERSONAL DATA

Name Natalie Christine Nakaten, née Kaloudis

Nationality German / Greek

Marital status Married, one child (born in 2014)

CAREER / EDUCATION

Since 2014 **Research Associate** GFZ German Research Centre for Geosciences Fluid Systems Modelling



2014 Doctorate

Department of Engineering Geology and Hydrogeology, RWTH Aachen University Dissertation: Economic competitiveness of underground coal gasification combined with carbon capture and storage in the Bulgarian energy network

2010 **M.Sc.** (Economic Geography) Faculty of Georesources and Materials Engineering, RWTH Aachen University

2008 **B.A.** (Geography, Sociology) Faculty of Arts and Humanities, RWTH Aachen University

RESEARCH INTERESTS

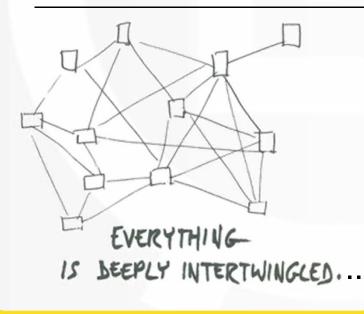
Techno-economic and thermodynamic process modelling, Energy systems



Previous EGU involvement

- Since 2011 EGU participant with poster and oral contributions
- 2012 & 2013 EGU Young Scientist Travel Award
- 2018 Co-convener ERE1.4 (Responsible mineral and energy resource development)

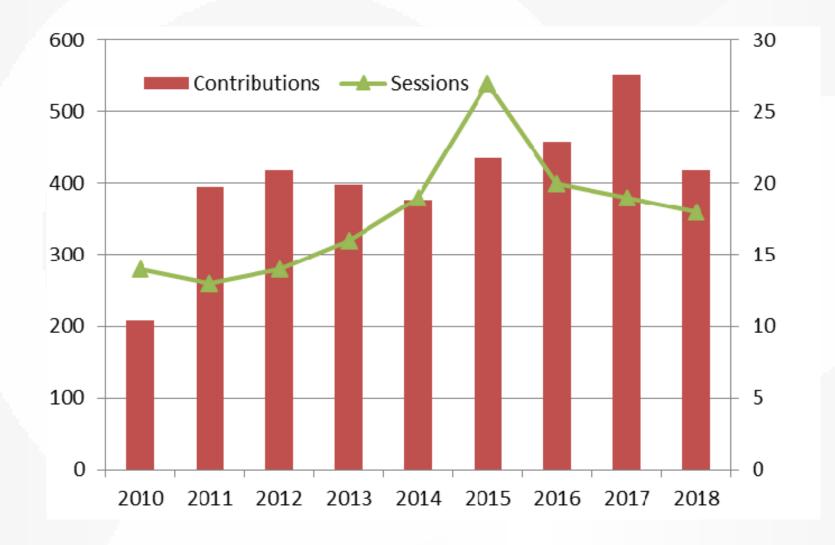
Motivation for applying as ECS Rep Candidate



- Enhance interchange with other scientists sharing knowledge and experiences
- Support networking
- Have a good time together



Scientific Programme of ERE 2010-2018





Scientific Programme of ERE - 2018

ERE1 – Integrated studies

- ERE1.1 Energy, Resources & the Environment
- ERE1.2 Energy and environmental system interactions Policy and modelling
- ERE1.4 Responsible mineral and energy resource development

ERE2 – Impact of energy and resource exploitation on the environment

- ERE2.1 Environmental impacts of hydraulic fracturing: Measurements, monitoring, mitigation and management
- ERE2.3 Petroleum exploration and production and their impact on the environment

ERE3 – Non-carbon based energy

- ERE3.1 Energy meteorology and spatial modelling of renewable energies
- ERE3.2/OS4.9 Marine renewable energy; resource characterisation, interactions and impacts
- ERE3.4 Conventional and unconventional geothermal resources: Advances in integrated approaches for exploration and monitoring
- ERE3.5 Numerical modeling in geothermics
- ERE3.7 The role of biomass in a sustainable bio-economy: significant developments and impact on land use, climate and environmental services



Scientific Programme of ERE - 2018

ERE4 – Carbon based energy

- ERE4.1 European gas hydrate occurrences as a resource of natural gas: exploration, production and risks
- ERE4.2 Unconventional hydrocarbon resources: Advances and new technologies

ERE5 – Geo-storage for a sustainable future

- ERE5.2 Geological CO₂ storage: Field methods and analysis of field data from sites and natural analogues
- ERE5.3 Process quantification and modelling in subsurface utilization
- ERE5.5 Assessment of barrier integrity in geological repositories for nuclear waste disposal and contaminant isolation

ERE6 – Thermal-hydro-mechanical and chemical processes related to geoenergy

- ERE6.1 Evaluation of coupled THMC processes related to geo-energy applications: from laboratory to reservoir scale
- ERE6.3/EMRP4.1/TS2.6 Fracture, mechanics and flow in tight reservoirs

ERE7 – Geo-materials from natural resources

 ERE7.1 Geomaterials in construction: resources, properties, performance, environmental interactions, decay, and extractive industries waste management



Division awards

Outstanding Student Poster or Pico (OSPP) Award

- **Registration** is open in association with abstract submission.
- Division president collects team to review the posters or PICOs.
- Awardee receives a conference fee waiver for the next EGU GA and a publication free of charge in an EGU Journal.

Outstanding Early Career Scientist Award

 Definition: An Early Career Scientists (ECS) is an undergraduate or postgraduate (Masters/PhD) student or a scientist who has received his or her highest degree (BSc, MSc, or PhD) within the past seven years.

Provided parental leave fell into that period, up to one year of parental leave time may be added per child, where appropriate.

- **Nominations** are sought by an open call.
- **Proposals** need to be submitted to the Division president by **15th June**.

http://www.egu.eu/awards-medals/proposal-and-selection-of-candidates/

Outstanding Student Poster Presentation

The European Geosciences Union presents the award to



Vincent Rolin

for the presentation entitled "Counter-rotating vortex pairs in the wake of a vertical axis wind turbine"

presented at the EGU General Assembly, Vienna, 8-13 April 2017.

CEGU European Geosciences Outstanding Student Poster Presentation

The European Geosciences Union presents the award to



Adrian Metzgen

for the presentation entitled

"Impact of pH on hydrogen oxidizing redox processes in aquifers due to gas intrusions"

presented at the EGU General Assembly, Vienna, 8-13 April 2017.



2018 Division Outstanding ECS Award

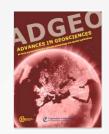
The European Geosciences Union presents the award to



Victor Vilarrasa

for his significant contributions to the understanding of the thermo-hydro-mechanical processes inducing seismicity in geo-energy-related operations.

EGU Geosciences Publish in Advances in Geosciences



- Special issues from 2013-2017 were published in Energy Procedia.
- Issue from this GA to come in Advances of Geosciences (ADGEO).
- Any presentation (oral, poster, PICO) from ERE division or co-organized sessions is eligible for publications. "No-shows" will be excluded.
- Manuscripts will have 4-10 pages.
- Guidelines for preparations and templates are available on the ADGEO webpage: https://www.advances-in-geosciences.net/
- Publication fee depends on the length of paper and your home institution.
- Deadline for submission of your paper: 31 May 2018
- Publication is planned for Fall 2018.
- Review will be done by ERE board, conveners and ERE authors of the General Assembly 2018.
- Contact: Michael Kühn + Sonja Martens (<u>adgeo.ere.egu@gfz-potsdam.de</u>)

Set up the programme for 2019

- Become involved as convener of a session or presenter.
- Number of conveners on a session: At session submission minimum 2 – maximum 5. Include young colleagues.
- Strengthen topics and/or try to cover emerging topics.
- Avoid duplications or overlap among sessions.
- Advertise your session in your scientific community.

GA timeline:

25 Jun – 13 Sep 2018Public call-for-sessions17 Sep – 12 Oct 2018Session programme finalization15 Oct 18 – 10 Jan 2019Abstract submission

 New for 2019 – One abstract rule: Authors are allowed as first author to submit either one regular abstract plus one abstract solicited by a convener, or two solicited abstracts.



Slides of past division meetings

ERE ENERGY, RESOURCES AND THE ENVIRONMENT Division meeting reports

Home / ERE / About / Division meeting reports

The EGU Division on Energy, Resources and the Environment organises a division meeting each year at the EGU General Assembly. During this event, the division president reports on division activities (awards and medals, publications, current and next year General Assemblies), Union-wide news, presents the current division officers and runs the election of new ones. This page features the minutes and/or presentation slides of previous meetings.

- Slides (PDF, 5.5 MB) from the ERE Division meeting 2017
- Slides (PDF, 2.6 MB) from the ERE Division meeting 2016
- Slides (PDF, 3.0 MB) from the ERE Division meeting 2015
- Slides (PDF, 11.9 MB) from the ERE Division meeting 2014
- Slides (PDF, 2.4 MB) from the ERE Division meeting 2013
- Slides (PDF, 235.6 KB) from the ERE Division business meeting 2012
- Slides (PDF, 771.7 KB) from the ERE Division business meeting 2011
- Slides (PDF, 214.7 KB) from the ERE Division business meeting 2010
- Minutes (PDF, 54.2 KB) from the ERE Division business meeting 2009

http://www.egu.eu/ere/reports/



Make use of the GA Survey

 GA 2017: More than 2,000 responses. These were examined carefully and played a large part in shaping improvements for the GA 2018.

- Distribution:
- via email to participants after GA
- links on social media & blog
- egu2018.eu website
- Survey live during until beginning of June



See you next year in Vienna: 7 - 12 April 2019