

European Conference On Surface Science



ecoss34 26th-31st August 2018, Aarhus, Denmark

www.ecoss2018.org

Abstract submission deadline: 1st March 2018

Organisational Timeline

Sept. 2017:	ECOSS 34 Website Online LOC announced ECOSS 34 Exhibitor Material Distributed KongressKompagniet hired for registration handling
Oct. 2017:	International Advisory Committee Announced
Nov. 2017:	Plenary Speakers Invited and Confirmed
Dec. 2017:	1st ECOSS Email Announcement
Jan. 2018:	ECOSS 34 Programme Committee Announced 2nd ECOSS email announcement Abstract submission and registration open Invited Speaker Invitations Sent
Feb. 2018:	3rd ECOSS Email Announcement Tutorial Seminars Announced
March 2018:	Abstract Submission Deadline
June 2018:	Early Bird Registration Period Ends
July 2018:	Regular Registration Period Ends
August 26th-31st:	ECOSS 34

ECOSS 34 Topics

CAT: Heterogeneous Catalysis

OXI: Oxide surfaces and thin films

2DM: 2D materials (graphene, TMDC's, h-BN, nano and heterostructures, etc.)

MOL: Organic molecules and molecular architectures on surfaces

SCR: Surface adsorption, desorption, diffusion and reactions

ELC: Electrochemistry on surfaces

NAM: Novel advancements in theoretical and experimental methods

SES: Surface electronic structure

ENM: Energy materials

SEM: Semiconductor surfaces

COR: Corrosion and anti-corrosive coatings

NPS: Functional surface nanostructures, plasmonics and sensors

WAT: Water on surfaces

SAC: Surface Astrochemistry

UDS: Ultrafast dynamics at surfaces

SMI: Surface Magnetism and Interfacial Superconductivity

Satellite Meetings:

MRS: Molecular Reaction on Surfaces (27th-28th August)

CDM: Villum Center of Excellence for Dirac Materials (30th August)

ECOSS 34 International Advisory Committee

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András Berkó (Past Chair), *University of Szeged*

Flemming Besenbacher, *Aarhus University*

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ECOSS 34 Programme Committee

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Jill Miwa

Richard Balog

Andrew Cassidy

Søren Ulstrup

Stefan Wendt

Kim Daasbjerg

Steen U. Pedersen

Mingdong Dong

Aarhus University

Plenary Speakers at ECOSS 34

PL-1: Monday 09:00

Atomically-resolved oxide surfaces: Lessons learned, surprises encountered, challenges posed.

Ulrike Diebold

*Institute of Applied Physics,
Vienna University of Technology,
Austria*



PL-4: Thursday 09:00

Spin excitations and interactions on superconductors - probed and manipulated with a scanning tunneling microscope.

Katharina Franke

*Department of Physics,
Freie Universität Berlin,
Germany*



PL-2: Tuesday 09:00

Probing surface catalysis in real time.

Anders Nilsson

*Department of Physics,
Stockholm University,
Sweden*



PL-5: Friday 09:00

Quantum materials: a new direction of surface science

Jinfeng Jia

*School of Physics and Astronomy,
Shanghai Jiao Tong University,
China*



PL-3: Wednesday 09:00

On-surface synthesis of graphene nanoribbons: From molecules to devices.

Roman Fasel

*EMPA, Material Science and
Technology,
Switzerland*



PL-6: Friday 10:30

A molecular view of heterogeneous catalysis

Jens Nørskov

*DTU Physics,
Technical University of Denmark,
Denmark*



Invited Speakers at ECOS 34

INVITED TALKS

CAT-IT-TUE-1 Scaling-relation-based kinetic Monte Carlo modelling of syngas reactions on stepped metals

Mie Andersen
Technische Universität München,
Germany



MOL-IT-THU-34 On-surface precise chemistry

Lifeng Chi
Soochow University,
China



2DM-IT-TUE-20 Chemistry makes graphene interfaces great again: a first-principles investigation

Marie-Laure Bocquet
Ecole Normale Supérieure - CNRS,
France



2DM-IT-WED-39 Tungsten disulfide on graphene: structural, electronic, nanotribological properties and optoelectronic applications

Camilla Coletti
Istituto Italiano di Tecnologia,
Italy



SAC-IT-THU-6 Structure and reactivity of interstellar nanodust

Stefan Bromley
University of Barcelona / ICREA,
Spain



UES-IT-MON-1 Momentum-resolved view of ultrafast dynamics of electrons, excitons and phonons in layered semiconductors

Ralph Ernstorfer
Freie Universität Berlin,
Germany



2DM-IT-MON-1 Quasiparticle interference in mono- and bilayer graphene

Carsten Busse
Universität Siegen,
Germany



UES-IT-MON-9 Ultrafast momentum-resolved carrier dynamics in 1D wires and 2D heterostructures

Isabella Gierz
Max Planck Institute for the
Structure and Dynamics of
Matter, Germany



OXI-IT-TUE-19 From oxide nano-objects to nano-oxides: the central role of the metallic substrate.

Jacek Goniakowski
Institut des Nanosciences
de Paris, CNRS & Sorbonne
Université, France



MOL-IT-WED-19 On-surface synthesis and manipulation of functional molecules

Leonhard Grill
University of Graz,
Austria



OXI-IT-WED-41 Reactions at oxide surfaces and oxide/metal interfaces

Henrik Grönbeck
Chalmers University of
Technology, Sweden



NPS-IT-THU-1 Strong coupling between surface phonon-polaritons and surface plasmon-polaritons

Christian Huck
Heidelberg University,
Germany



NPS-IT-THU-6 Chemical applications of nanophotonic: probing the structure of soft matter with chiral nanostructures

Malcolm Kadodwala
School of Chemistry, University
of Glasgow, United Kingdom



SML-IT-WED-1 An orbitally driven single atom magnetic memory on black phosphorus

Alexander Khajetoorians
Radboud University,
Netherlands



CAT-IT-THU-29 The role of supported metal nanoclusters and ions in thermal and photoinduced catalytic reactions

János Kiss
University of Szeged,
Hungary



MOL-IT-THU-29 Molecular nanoarchitectures from on-surface reactions and assembly

Jennifer MacLeod
Queensland University of
Technology (QUT), Australia



MOL-IT-THU-24 On-surface synthesis and electronic structure of surface-supported molecular networks

Sabine Maier
Friedrich-Alexander-University
Erlangen-Nürnberg, Germany



WAT-IT-THU-13 Ice, ice maybe?

Angelos Michaelides
UCL,
United Kingdom



WAT-IT-TUE-1 Real-space investigation of microsolvation: Water structures in the presence of organic molecules or ions

Karina Morgenstern
Ruhr-Universität Bochum,
Germany



ENM-IT-MON-10 Hybrid catalysis for efficient CO₂ reduction using molecular complex/carbon based materials

Marc Robert
Université Paris Diderot -
CNRS, France



NAM-IT-TUE-1 Understanding materials from synthesis to electronic structure at the MAESTRO beamline

Eli Rotenberg
ALS, Lawrence Berkeley National
Laboratory, United States



WAT-IT-TUE-6 Solid-liquid interfaces: a new surface science frontier

Miquel Salmeron
Lawrence Berkeley National
Laboratory, United States



CAT-IT-WED-14 Designing heterogeneous alloy catalysts from first principles and surface science

Charles Sykes
Tufts University,
United States



SML-IT-WED-4 Atomic scale imaging of strain-tuned emergent phases of matter

Peter Wahl
University of St Andrews,
United Kingdom



SAC-IT-THU-1 Measurements of activation energies for diffusion of hydrogen atom on pure CO solid

Naoki Watanabe
Hokkaido University,
Japan



SCR-IT-MON-1 Growth and Surface Chemistry of Rutile IrO₂(110)

Jason Weaver
University of Florida,
United States



NAM-IT-WED-8 Zooming into atomic interactions with lateral force microscopy

Jay Weymouth
University of Regensburg,
Germany



Conference Presentations

6 Plenary talks: 50 min + 10 min discussion

5 Parallel Topical Sessions:

27 Invited talks: 35 min + 5 min discussion

~273 Contributed Talks: 17 min + 3 min discussion

~127 Posters

ECOSS 34 Overview Programme

PROGRAMME OVERVIEW

The programme printed in this booklet was correct as of the 30th of July, but some changes may have occurred since. Please see the conference website for the most updated version.

SUNDAY 26 TH AUGUST	
10:00 to 16:00	Tutorials and Workshops (Aarhus University)
16:00 to 19:00	Welcome Reception and Registration (iNano, Aarhus University)

MONDAY 27 TH AUGUST						
08:45	Welcome					
09:00	Plenary talk 1: Ulrike Diebold					
10:00	Coffee break					
	Kongres	Nortvegia	Dania	Suecia	Room 12	Room 11
10:30						
10:50	OXI	2DM	SCR	UES	ENM	MRS
11:10	1/8	1/8	1/6	1/3	1/2	1/6
11:30						
11:50						
12:10						
12:30	Lunch					
14:00						
14:20					ENM	
14:40	OXI	2DM	SCR	UES		MRS
15:00	2/8	2/8	2/6	2/3	2/2	2/6
15:20						
15:40						
16:00	Coffee break					
16:30						
16:50						
17:10	OXI	2DM	SCR	UES	ELC	MRS
17:30	3/8	3/8	3/6	3/3	1/2	3/6
17:50						
18:10						
18:30	Poster Session 1 and Exhibition					
20:00						

TUESDAY 28 TH AUGUST						
09:00	Plenary talk 2: Anders Nilsson					
10:00	Coffee break					
	Kongres	Nortvegia	Dania	Suecia	Room 12	Room 11
10:30						
10:50	OXI	2DM	WAT	NAM	ELC	MRS
11:10	4/8	4/8	1/3	1/2	2/2	4/6
11:30						
11:50						
12:10						
12:30	Lunch					
14:00				NAM		
14:20						
14:40	OXI	2DM	WAT	SEM	MOL	MRS
15:00	5/8	5/8	2/3	1/2	1/7	5/6
15:20						
15:40						
16:00	Coffee break					
16:30						
16:50						
17:10	OXI	2DM	CAT	SEM	MOL	MRS
17:30	6/8	6/8	1/6	2/2	2/7	6/6
17:50						
18:10						
18:30	Poster Session 2 and Exhibition					
20:00						

WEDNESDAY 29 TH AUGUST						
09:00	Plenary talk 3: Roman Fasel					
10:00	Coffee break					
	Kongres	Nortvegia	Dania	Suecia	Room 12	Room 11
10:30						
10:50	OXI	2DM	CAT	MOL	NAM	
11:10	7/8	7/8	2/6	3/7	2/2	
11:30						
11:50						
12:10						
12:30	Lunch					
14:00						
14:20						
14:40	OXI	2DM	CAT	MOL	SMI	
15:00	8/8	8/8	3/6	4/7		
15:20						
15:40						
16:00	Coffee break					
16:30	Social programme					
16:50						
17:10						
17:30						
17:50						
18:10						
19:00	Conference Dinner					

THURSDAY 30 TH AUGUST						
09:00	Plenary talk 4: Katharina Franke					
10:00	Coffee break					
	Kongres	Nortvegia	Dania	Suecia	Room 12	Room 11
10:30						
10:50			COR			
11:10	CAT	NPS		MOL	WAT	CDM
11:30	4/6	1/3	SCR	5/7	3/3	1/3
11:50			4/6			
12:10						
12:30	Lunch					
14:00						
14:20						
14:40	CAT	NPS	SCR	MOL	SAC	CDM
15:00	5/6	2/3	5/6	6/7	1/2	2/3
15:20						
15:40						
16:00	Coffee break					
16:30						
16:50						
17:10	CAT	NPS	SCR	MOL	SAC	CDM
17:30	6/6	3/3	6/6	7/7	2/2	3/3
17:50						
18:10						

FRIDAY 31 ST AUGUST	
09:00	Plenary talk 5: Jinfeng Jia
10:00	Coffee break
10:30	Plenary talk 6: Jens Nørskov
11:30	Prize Ceremony
12:00	Close of conference
12:30	Excursions
SATURDAY 1 ST SEPTEMBER	
10:00 to 16:00	Tutorial Workshop (Aarhus University)

CAT	Heterogeneous catalysis
OXI	Oxide surfaces and thin films
2DM	2D materials

MOL	Organic molecules and molecular architectures on surfaces
SCR	Surface adsorption, desorption, diffusion and reactions
ELC	Electrochemistry on surfaces

NAM	Novel advancements in theoretical and experimental methods
ENM	Energy materials
SEM	Semiconductor surfaces

COR	Corrosion and anti-corrosive coatings
NPS	Functional surface nanostructures, plasmonics and sensors
WAT	Water on surfaces

SAC	Surface astrochemistry
UES	Ultrafast dynamics and electronic structure
SMI	Surface magnetism and interfacial superconductivity

MRS	Satellite Meeting: Molecular Reaction on Surfaces
CDM	Satellite Meeting: Villum Centre of Excellence for Dirac Materials

Venue – Scandinavian Congress Center

European Conference on
Surface Science

» ECOSS
Aarhus 2018

Radisson Blu Scandinavia Hotel
- Scandinavian Congress Center

Centrally located in Aarhus, next to the Concert Hall and the City Hall.

In Aarhus city centre close to the Central Station and the pedestrianised high street.
1,100 parking spaces immediately outside the hotel; 35 modern conference rooms for creative and successful meetings, and, of course, there is always a consultant permanently coupled with all events.

The conference facilities at Radisson Blu Scandinavia Hotel Aarhus have five stars in the national trade association's star classification system for the hotel, restaurant and tourism industry in Denmark, and the hotel itself has four stars in the star classification system.

35 meeting rooms makes it possible to successfully stage meetings with just a few participants, or conduct conferences with up to 1600 delegates in the beautiful conference hall. In our preferred setup for ECOSS 2018 the plenary hall seats up to 845 and as such easily facilitates the conference.

Selected halls and rooms

Plenaries: Scandinavian Congress Center (1,600)
Breakout rooms: Nortvegia (247), Dania (247), Suecia (247)
Meeting room: 35 modern meeting rooms

Exhibition:

1000 m2 dedicated for exhibition in direct connection to plenaries
400 m2 dedicated for poster session

