

CALL FOR ABSTRACTS AND MAJOR TOPICS

Please submit your abstracts according to the following topics online via www.som2017.org.

Deadline for abstract submission is 15 April 2017.

Major Topics

Session 1: Global perspectives (invited speakers only)
Session 2: Modelling SOM: from soil pore to climate change
Session 3: Methods 1: Visualising SOM
Session 4: Methods 2: Quantifying pools and fluxes of SOM
Session 5: Soil Health 1: Biological interactions
Session 6: Soil Health 2: The role of decomposition
Session 7: SOM as natural capital

Detailed session descriptions available at www.som2017.org.

REGISTRATION FEES*

	Early Bird Registration until 2 July 2017	Late Registration from 3 July 2017
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BSSS members

PhD Students	£ 200	£ 275
Regular	£ 275	£ 350

Non-members

PhD Students	£ 325	£ 400
Regular	£ 400	£ 475

*Registration fees include catering during coffee and lunch breaks.

Social Programme

Icebreaker Party, 3 September	included
Social Tour	tba
Social Evening, 5 September	tba
Scientific Excursions	tba

GENERAL INFORMATION

Venue

Rothamsted Research
Harpenden | Hertfordshire AL5 2JQ
United Kingdom

Date

3–7 September 2017



Conference Chair

Prof Jennifer Dungait
Rothamsted Research
North Wyke | Okehampton | Devon EX20 2SB
United Kingdom

Local Organising Committee

Prof Liz Baggs	Dr Claire Horrocks
Ian Brown	Prof Steve McGrath
Prof Chris Collins	Prof David Powlson
Prof Keith Goulding	Dr Marc Redmile-Gordon
Dr Andy Gregory	Dr Jacqueline Stroud
Prof David Hopkins	Prof Andy Whitmore

Scientific Committee

Muhammed Arif	Johannes Lehmann
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John Crawford	Cornelia Rumpel
Maria De Nobili	Rolf Sommer
Mark Farrell	Johan Six
Iain Hartley	Pete Smith
Henry Janzen	Michael Schmidt
Karstan Kalbitz	Diana Wall
Yakov Kuzyakov	

Industrial Exhibition

The international symposium will be accompanied by a specialised industrial exhibition. Interested companies are invited to request information on the exhibition modalities from the conference organisation Conventus.

Professional Congress Organiser

Conventus Congressmanagement & Marketing GmbH
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6th INTERNATIONAL SYMPOSIUM ON SOIL ORGANIC MATTER

HEALTHY SOILS FOR SUSTAINABLE AGRICULTURE: THE ROLE OF SOM

3–7 SEPTEMBER 2017
HARPENDEN, UNITED KINGDOM

www.som2017.org

JOINT MEETING OF



BRITISH SOCIETY OF SOIL SCIENCE



PRELIMINARY PROGRAMME
CALL FOR ABSTRACTS



WELCOME NOTE



Dear Colleagues

It is our pleasure to invite you to the 6th International Symposium on Soil Organic Matter in 2017 at Rothamsted Research, which is run jointly with the British Society of Soil Science.

Rothamsted is the oldest agricultural research station in the world. Therefore, as well as the major themes that apply to all areas of SOM science, the theme of this Symposium particularly focusses on the management of agricultural soils to deliver environmentally and economically sustainable supplies of sufficient, nutritious food for all, in the context of global population increase, climate change and unequal resource distribution.

The theoretical and applied study of SOM has never been more important. In 2016 it became likely that the mean monthly atmospheric CO₂ concentration will not return to below 400 ppm for the indefinite future. The recent focus on the role of Soil Health to help bridge the Yield Gap has confirmed the important role of SOM as Natural Capital. Therefore, optimizing SOM management offers the potential to both mitigate greenhouse gas emissions and increase food production and quality.

Rothamsted is the home of the world-famous Long Term and Classical Experiments established by Sir John Lawes and Sir Henry Gilbert more than 170 years ago. The pioneering work of Prof David Jenkinson on the mathematical modelling of SOM transformations exploited this unique resource, and led to the development of the globally-renowned RothC model; we dedicate this Symposium to his memory.

Prof Jennifer Dungait
On behalf of the 6th International Symposium on Soil Organic Matter Organising Committee and Scientific Committee

SCIENTIFIC PROGRAMME · SUNDAY, 3 SEPTEMBER

Opening registration and icebreaker party

SCIENTIFIC PROGRAMME · MONDAY, 4 SEPTEMBER

Opening of SOM 2017 & Welcome to Rothamsted

SESSION 1 – GLOBAL PERSPECTIVES

Plenary: Chuck Rice (Manhattan, KS/US)

SOM and soil security

Invited speakers

Abad Chabbi (Paris/FR)

Progress towards 4 per 1000

Bridget Emmett (Bangor/UK)

Creating a national-scale SOM inventory

Pan Genxing (Nanjing/CN)

Soil environmental protection in China

Michael Schmidt (Zurich/CH)

SOM in space and time

SESSION 2 – MODELLING SOM:

FROM SOIL PORE TO CLIMATE CHANGE

Plenary: Francesca Cotrufo (Fort Collins, CO/US)

Toward a new modelling paradigm – from turnover-defined to physically-defined soil organic matter pools

Parallel sessions

2a: Soil self-organisation

2b: Next generation SOM models

2c: C sequestration and climate change

Workshop 1

SCIENTIFIC PROGRAM · TUESDAY, 5 SEPTEMBER

SESSION 3 – METHODS 1:

VISUALISING SOM

Plenary: Ingrid Kögel-Knabner (Munich/DE)

The soil matrix – visualising and quantifying microscale associations of organic and mineral components

Parallel sessions

3a: Visualising SOM at the soil pore scale

3b: Spatial variability of SOM concentration, composition, and persistence

3c: Mapping and monitoring of soil organic matter

SESSION 4 – METHODS 2:

QUANTIFYING POOLS AND FLUXES OF SOM

Plenary: Richard Evershed (Bristol/UK)

Nearly two decades of stable isotope probing:

So where are we now in using the technique to investigate SOM cycling?

SCIENTIFIC PROGRAM · TUESDAY, 5 SEPTEMBER

Parallel sessions

4a: Mass spectrometry – the key to the soil organic matter 'Black Box'

4b: What is humified organic matter?

4c: Organic nutrients?

SCIENTIFIC PROGRAMME · WEDNESDAY, 6 SEPTEMBER

SESSION 5 – SOIL HEALTH 1:

BIOLOGICAL INTERACTIONS

Plenary: Ed Gregorich (Ottawa/CA)

Evolution of the soil health concept

Parallel sessions

5a: Ecosystem engineers

5b: Hot moments, hot spots and hot spheres

5c: Biology of deep soils – The final frontier?

SESSION 6 – SOIL HEALTH 2:

THE ROLE OF DECOMPOSITION

Plenary: David Hopkins (Cirencester/UK)

Managing decomposition

Parallel sessions

6a: SOM decomposition – links between carbon and nutrient cycling

6b: Managing soil organic matter decomposition and stabilization for carbon sequestration and improved soil health

6c: SOM in rice paddy systems

Workshop 2

SCIENTIFIC PROGRAMME · THURSDAY, 7 SEPTEMBER

SESSION 7: SOM AS NATURAL CAPITAL

Plenary: Rattan Lal (Columbus, OH/US)

SOM in the Anthropocene

Parallel sessions:

7a: National and international SOM policy

7b: Management effects on SOM and ecosystem services

7c: Incorporating SOM into farming system evaluation

BSSS Open Workshop: Managing SOM in Agriculture

Closing & Prize giving