

What?

WORKSHOP

Morphogenesis & Biomineralization in Foraminifera and other organisms

When?

July 10-12, 2019

Where?



Instytut Nauk Geologicznych PAN
Institute of Geological Sciences
Polish Academy of Sciences
Research Centre in Kraków
ul. Senacka 1, POLAND



Why?

Very little is known about mechanisms controlling morphogenetic processes in Foraminifera in comparison to the knowledge based on extensive studies on proxies and biomineralization. Therefore, we would like to start filling that gap by sharing ideas on novel methodologies and the latest discoveries on morphogenesis and biomineralization. We plan a brainstorming workshop with two open sessions and complementary closed discussion panels focused on emerging research frontiers and future collaboration prospects. We hope that all sessions and networking activities in the unique atmosphere of Old Town in Kraków can manage to stimulate vibrant discussions and progress our knowledge on foraminiferal *Growth and Form*.

Who?

Biogeosystem Modelling Group

Organizing Committee

Chair

• Jarosław Tyszka → ndtyszka@cyfronet.pl

Logistics

• Anna Spadło → ndspadlo@cyfronet.pl

• Agata Jarzynka

• Jan Goleń

• Karolina Kobos

biogeo lab
group
face

Morphogenesis & Biomineralization in Foraminifera and other organisms

Registration

- registration is free of charge
- please cover all your costs (trips, hotels, food etc.)
- coffee/tea/water will be available
- registration is obligatory via:

<https://doodle.com/poll/vsihpfa988d7ncen>

Senacka, 31-002 Kraków, Poland

Table Calendar

	Jul 10 WED	Jul 11 THU	Jul 12 FRI
1 participant	✓1	✓1	✓1
<input type="text"/>	✓	✓	✓

choose the day you want to participate in the workshop

add your name, surname and e-mail address
example: John Foram (j.foram@fiction.com)

✓ 3

Morphogenesis & Biomineralization in Foraminifera and other organisms

Workshop program

Invited speakers

Ulf Bickmeyer



Jelle Bijma



Zofia Dubicka



Jan Goleń



Martin J. Head
▷ Research Center Open Seminar



Johann Hohenegger



Jarosław Stolarski



Danna Titelboim



Jarosław Tyszka



Osmín Jared Vásquez Hernández
▷ Research Center Open Seminar



Wednesday –10.07.2019

10:30 – 13:00

OPEN SESSION

(*30 min. lecture + 10 min. discussion)

10:30 – 10:40 ▷ Jarosław Tyszką: *Introduction to the Workshop*

10:40 – 11:20 ▷ Johann Hohenegger: *Dependence in foraminiferal growth and development on biomineralization and chamber (test-) form, and possible disturbances*

11:20 – 11:40 ----- COFFEE BREAK -----

11:40 – 12:20 ▷ Jelle Bijma: *Calcification mechanisms in foraminifera and proxie incorporation*

12:20 – 13:00 ▷ ZofiaDubicka: *Involutinida (Foraminifera): Opening a nanostructural Pandora's Box - new data and remaining questions*

13:00 – 14:30

LUNCH BREAK

14:30 – 15:10

OPEN LECTURE

Research Center Seminar

14:30 – 15:10 ▷ Osmín Jared Vásquez Hernández: *Microfaunal content of the sedimentary formations of Guatemala*

15:10 – 16:30

CLOSED SESSION

(present/future projects/meetings)

15:10 – 16:00 ▷ Grzegorz Racki & Zofia Dubicka: *NCN Opus-15 Project Working Group on Middle Paleozoic Micropaleontology; calcareous microfossils, incl. foraminifers; impact of diagenesis on mineralization patterns; in fossilio vs in vivo methodology*

16:00 – 16:30 ▷ Discussion - to be proposed

16:30 – 17:00 ▷ **Presentation of the BioGeoLab**

17:00 – 20:00

THE OLD TOWN SIGHTSEEING + DINNER

Thursday –11.07.2019

10:00 – 16:00

OPEN SESSION

(*30 min. lecture + 10 min. discussion)

10:00 – 10:40 ▷ Ulf Bickmeyer: *The holobiont sponge: a fluorescent journey from basic research to application*

10:40 – 11:20 ▷ Jarosław Stolarski: *Day and night on the reef: secrets of diurnal biomineralization rhythm of scleractinian corals*

11:20 – 11:40 -----COFFEE BREAK-----

11:40 – 12:20 ▷ Danna Titelboim: *Controlling calcification- insights from temperature experiments*

12:20 – 13:00 ▷ Jarosław Tyszka: *Linking morphogenesis with biomineralization in Foraminifera*

13:00 – 14:30

LUNCH BREAK

14:30 – 15:10 ▷ Jan Goleń: *Organization and dynamics of actin cytoskeleton in Foraminifera -functional and evolutionary perspective*

15:10 – 15:20 ▷ Jarosław Tyszka: *Future workshops*

15:20 – 15:30 ▷ Jelle Bijma: *LiveForams-2020 - Living Foraminifera as a Key to understand the Past, Present and Future* – Workshop announcement

15:30 – 16:00 -----COFFEE BREAK-----

16:00 – 17:30

CLOSED SESSION

16:00 – 17:30 ▷ Jarosław Tyszka: *NCN Opus-10 Project - Discussions on: actin dynamics, morphogenesis and biomineralization*

17:30 – 20:00

SURPRISE + DINNER

Friday – 12.07.2019

9:00 – 11:30

CLOSED SESSION

9:00 – 10:20 ▷ *Future prospect: Confocal microscopy vs TEM – comparative approach; inhibition experiments; fossil vs live forams – novel methodologies; diagenetic overprints*

10:20 – 10:40 ----- COFFEE BREAK -----

10:40 – 11:30 ▷ Jarosław Tyszka: *Frontiers in morphogenesis and biomineralization*

11:30 – 13:00

LUNCH BREAK

13:00 – 14:00

OPEN LECTURE Research Center Seminar

13:00 – 14:00 ▷ Martin J. Head: *The evolving geological time scale: a focus on the Quaternary*

14:00 – 16:00

DISCUSSIONS (to be proposed)