

Program for the 6th International NanoSIMS user meeting – Utrecht University, 26-27 Sep 2016

Talks are given in the **Wachendorffzaal**

| Monday 26th September 2016                   |       |                    |          |   |   |
|--|-------|--------------------|----------|---|---|
|  | Start | Activity           | Duration | Title   | Speaker / Chair   |
|  | 8:30  | Registration       |          |   |   |
|  | 9:00  | Workshop opening   |          |   | Jack Middelburg and Lubos Polerecky                           |
| Session theme: Geochemistry & Cosmochemistry | 9:15  | Talk               | 20 min   | Simultaneous measurements of C and N isotopic composition and N abundance in diamonds by nanoSIMS                       | J. Wang, S. B. Shirey and E. H. Hauri                         |
|  | 9:35  | Talk               | 20 min   | A comparison of in-situ and acid residue presolar SiC grains using nanoSIMS and ToF-SIMS                                | A. Clarke, I. C. Lyon and T. Henkel                           |
|  | 9:55  | Talk               | 25 min   | Using the nanoSIMS to study the Earth differentiation: the case of S and Pt   | L. Remusat, T.-A. Suer, J. Siebert and G. Fiquet              |
|  | 10:20 | Coffee             | 30 min   |   |   |
|  | 10:50 | Talk               | 20 min   | Nanosims measurements of minor and trace siderophile elements in chondritic Fe-Ni metal using primary Cs <sup>+</sup> . | S. Mostefaoui, N. Meftah, A. Jambon and E. H. Guedda          |
|  | 11:10 | Talk (keynote)     | 30 min   | Nanosims <sup>207</sup> Pb/ <sup>206</sup> Pb analysis of metallic Pb nanospheres in zircons                            | I.C. Lyon, et al.   |
|  | 11:40 | Discussion         | 35 min   | on session theme  | Ian Lyon  |
|  | 12:15 | Lunch              | 1h 15min |   |   |
| Technology & Methodology                     | 13:30 | Tutorial (group 1) | 1 hr     | Practical tutorial on low energy deposition and charge compensation (nanoSIMS lab)                                      | François Hillion  |
|  | 14:30 | Tutorial (group 2) | 1 hr     |   |   |
|  | 13:30 | Posters            | 2 hrs    | Poster session is <b>parallel</b> with the tutorial   |   |
|  | 15:30 | Coffee             | 20 min   | (Combined with a <b>poster session</b> )  |   |
|  | 15:50 | Talk               | 15 min   | Latest news from Cameca: new products; new people   | François Horreard   |
|  | 16:05 | Talk               | 20 min   | Introducing the nanoSIMS lab at Academia Sinica in Taiwan   | Zan Peeters, Kota Naito, Jiun-San Shen, Typhoon Lee           |
|  | 16:25 | Talk (keynote)     | 30 min   | NanoSIMS based Correlative Microscopy for high-resolution high-sensitivity nano-analytics                               | J. -N. Audinot, T. Wirtz, D. Dowsett, F. Vollnhals, S. Eswara |
|  | 16:55 | Discussion         | 35 min   | on session theme  | Jean-Nicolas Audinot  |
|  | 17:30 | End of day 1       |          |   |   |
|  | 17:30 | Free time          | 60 min   | Walk to the dinner venue  |   |
|  | 18:30 | Dinner             |          | Restaurant het Oude Tolhuys   |   |

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**Tuesday 27<sup>th</sup> September 2016**

|   | <b>Start</b> | <b>Activity</b> | <b>Duration</b> | <b>Title</b>   | <b>Speaker / Chair</b>   |
|---|--------------|-----------------|-----------------|--|--|
|   | 8:55         | Opening         |                 |  |  |
| Material sciences                               | 9:00         | Talk            | 20 min          | Assessing hydrogen uptake at manganese sulphide inclusions in 303 stainless steel using nanoSIMS   | Yasser Al Aboura, Anthony Cook, Katie L. Moore, Robert Akid  |
|   | 9:20         | Talk            | 20 min          | Hydrogen uptake in zirconium alloy and 3D depth profile analysis by nanoSIMS   | K. Li, T. Aarholt, H. Jiang and C. R.M. Grovenor   |
|   | 9:40         | Talk            | 20 min          | Visualization of the assimilation of nanoparticles in biological tissues by SIMS nano-analysis.  | E. Lentzen, J.-N. Audinot, N. Valle, A. Georgantzopoulou, K. Mehennaoui, S. Cambier and A. C. Gutleb       |
|   | 10:00        | Coffee          | 45 min          | <b>(Combined with a poster session)</b>  |  |
| Microbiological and biogeochemical applications | 10:45        | Talk            | 25 min          | The potential to explore external surfaces using EXLIE Cs-deposition   | C. Höschen, J. Lugmeier, T. Höschen, L. Pohl, G. Meisl and I. Kögel-Knabner                                |
|   | 11:10        | Talk (keynote)  | 30 min          | NanoSIMS at the cutting edge – challenges, recent applications and future research directions in microbiology                            | Niculina Musat, Hryhoriy Stryhanyuk, Matthias Schmidt & Hans H. Richnow                                    |
|   | 11:40        | Discussion      | 35 min          | on session theme   | Niculina Musat   |
|   | 12:15        | Lunch           | 1h 45min        | <b>(Can be combined with a lab tour)</b>   |  |
|   | 14:00        | Talk            | 20 min          | Topography effects on the visualization of soil organic matter distribution on mineral surfaces: a combined approach of AFM and nanoSIMS | L. Pohl, C. Schurig, K. Eusterhues, Y. Fleming, C. W. Mueller, C. Höschen, K. U. Totsche, I. Kögel-Knabner |
|   | 14:20        | Talk            | 20 min          | Microbial interactions revealed with NanoSIMS  | A. Vogts, F. Eigemann, S. Weber and M.Voss   |
|   | 14:40        | Talk            | 20 min          | The effect of phosphorus limitation on harmful algal blooms in the Baltic Sea: a single cell view  | Niels J. Schoffelen, Timothy G. Ferdeman, Wiebke Mohr, Helle Ploug, Sten Littmann, M.M.M. Kuypers          |
|   | 15:00        | Coffee          | 20 min          | <b>(Combined with a poster session)</b>  |  |
|   | 15:20        | Talk            | 20 min          | Exploring the metabolism of photosymbiosis in the oceanic plankton with nanoSIMS   | J. Decelle, H. Stryhanyuk, B. Gallet, M. Schmidt, S. Marro, N. Musat                                       |
|   | 15:40        | Talk            | 20 min          | Phenotypic heterogeneity driven by nutrient limitation promotes growth in fluctuating environments                                       | F. Schreiber, S. Littmann, G. Lavik, S. Escrig, A. Meibom, M.M.M. Kuypers, and M. Ackermann                |
|   | 16:00        | Discussion      | 1 hr            | diverse topics   | L. Polerecky & M. Kienhuis   |
|   | 17:00        | End of day 2    |                 |  |  |

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