

## INQUA2015, Session report, August 2015

Commission	SACCOM
Focus group	SEQS
Session Code	S03
Session title:	<b>Progress in European Quaternary Stratigraphy</b>
Date of the session:	01-08-2015, Poster session 02-08-2015, Oral session
Name and affiliation of lead convener:	Wim Westerhoff (Geological Survey of the Netherlands, Utrecht) Guzel Danukalova (Institute of Geology, Ufimian Scientific Centre, Russian academy of sciences, Ufa) Markus Fiebig (University of Natural Resources and Life Sciences, Vienna)]
Approximate numbers of participants:	14 oral presentation, 6 poster presentations, Approximately 50 participants came to the talks in the Hall A (02.08.2015). During the poster session each presenter gave 5 minutes explanation on his poster. Many Congress participants were interested in the posters given the vividly discussions.

### Summary of the Session:

The session was aimed to focus on the Quaternary Stratigraphy of Europe with a main attention to the record of continental sequences. The correlation and interpretation of regional stratigraphical schemes in a pan-European frame is one of the core-activities of international focus group SEQS. During the poster and oral sessions participants presented overviews of main subdivisions of the Quaternary from the Atlantic seaboard to the Urals. In addition details of local stratigraphical studies were presented too.

A number schemes presented during Congress was shown the regional / national Quaternary stratigraphy across Europe. These schemes are based on lithostratigraphical, palaeontological and geochronological data.

The presentation and discussion was concentrated on the five main transition/boundaries known from Quaternary sequences: and main boundaries were discussed:

- Pliocene – Pleistocene boundary
- Gelasian – Early Pleistocene boundary
- Early – Middle Pleistocene boundary
- Middle – Late Pleistocene
- Late Pleistocene – Holocene

Wim E. Westerhoff (invited speaker) gave an overview of the work undertaken by SEQS and gave a brief outline of the future work on *Correlating Europe's continental stratigraphy*. Summaries of Quaternary stratigraphical investigations were given by Pierluigi Pieruccini *Terrestrial Quaternary Stratigraphy in Italy*, Guzel Danukalova *Quaternary stratigraphy of the European part of Russia*, and Sebastian M. Gibson *Pleistocene History of the Birmingham District, Midlands, England*.

New data on the Early Pleistocene stratigraphy was given by Rachel M. Lamb in her talk *Early Quaternary Stratigraphy of the central North Sea* and by Stephanie Scheidt & Gerald Gabriel A

*consistent magnetic polarity stratigraphy of late Neogene to Quaternary fluvial sediments from the Heidelberg Basin (Germany): A new time frame for the Plio-Pleistocene palaeoclimatic evolution of the Rhine Basin.* Maria Sekar Proborukmi presented interesting new results from a long core in North Germany *Quaternary palynological and environmental records from the Garding-2 sediment core, coastal northwest Germany.*

Middle Pleistocene stratigraphy and some new data were presented by Leszek Marks *Revision of the Saalian Glaciation limit in Central Europe.* Thijs van Kolfschoten presented an overview of the stratigraphical results from the Schöningen site: *The Schöningen late Middle Pleistocene geological sequence in a broader perspective.* Natalia P. Gerasimenko presented an overview on the stratigraphical work in Ukraine: *Stratigraphy of the late Middle Pleistocene in the Central Ukraine.*

New data on the Late Pleistocene stratigraphy was given by Alessandra Negri (invited speaker) *A possible Upper Pleistocene global boundary stratotype section and point (GSSP): The Fronte Section at Taranto (Italy).* Jasper Knight showed *Late Quaternary stratigraphy and dating of periglacial deposits, Guernsey, Channel Islands* while Margot Böse talked about *The timing of the Weichselian Pomeranian ice marginal position south of the Baltic Sea: a critical view on morphological and geochronological results.*

In his talk Markus Fiebig discussed the applicability of numerical dating in river terraces from the Alpine foreland: *Chronostratigraphic correlation of Pleistocene river terrace sediments A case for reliable numerical dating.* Tivadar Gaudenyi showed a case study on malacology of borehole data from Serbia: *Stratigraphy of the Quaternary warm stage fluvial series at the Serbian part of the Pannonian realm based on the malacological record.* Tuncer Demir gave an extended overview of the relationship between river development and tectonics: *Influence of crustal properties on patterns of Quaternary stratigraphy across Western, Central and Eastern Europe.* Aeolian deposits and their stratigraphy were reported from Belgium and Poland. Koen Beerten: *Sandy aeolian deposits from the Gent Formation (Flanders, Belgium): lithostratigraphy, geomorphology and age.* Lukasz Bujak: *Aeolian activity in Quaternary period in eastern part of Europe (an example of Poland).*

Manfred Frechen reported on the result and age of the *Garding Drilling Project - Quaternary of Northern German.* Yan Li presented the OSL datings from Heidelberg: *OSL Dating of Middle and Upper Pleistocene sediments from the Heidelberg Basin Drilling Project (Germany).*

At the end of the session SEQS introduced a new board of the group (President Markus Fiebig, past-president Wim Westerhoff, Secretary Pierluigi Pieruccini, and a vice president Guzel Danukalova).

Furthermore the presenters were encouraged to prepare manuscripts of their presentation for publication in the special volume of the Quaternary International which is planned to be organised at the beginning of the 2016.

Finally Wim Westerhoff thanked all presenters and attendees of the session for their presence and contribution to the discussion.