GraSage project presentation

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RWTH AACHEN UNIVERSITY

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Graphene FLAGSHIP Kick-Off meeting
March 21, 2018
Madrid, Spain

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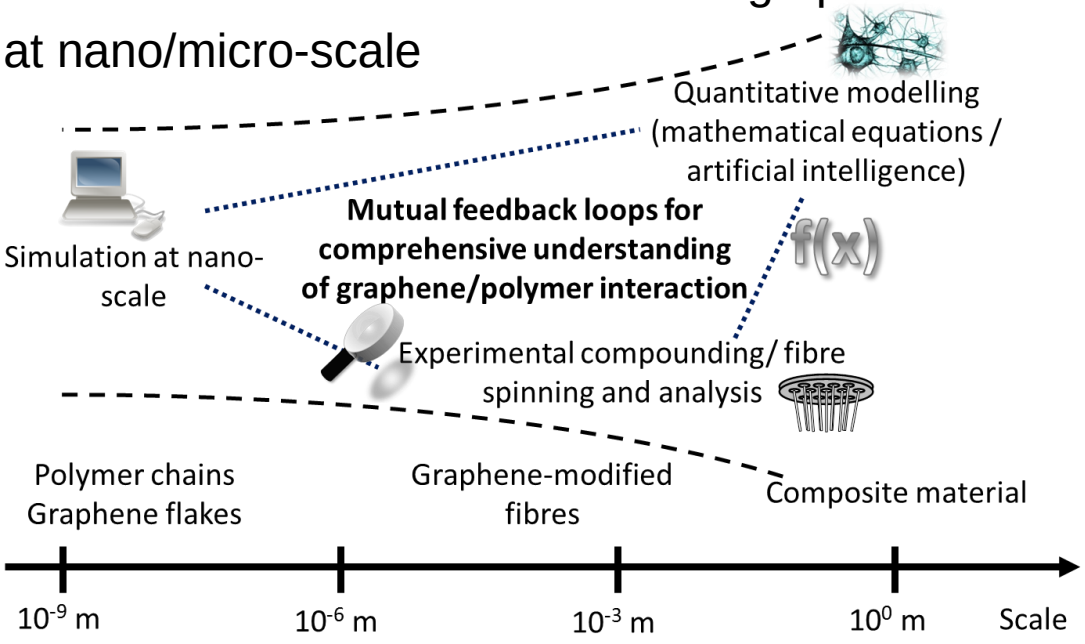
Motivation and aim of the project

- Interaction of graphene in polymer materials hasn‘t been studied sufficiently so far
- Development of high-performance graphene composites is one of the Flagship‘s goals
- Fibers are widely used materials and parts of materials on every scale (filaments, textiles, semi-finished products)
- Precise understanding of interactions could accelerate graphene transfer to industry

Aim of the project

- Fabrication of graphene-modified compounds and fibres (DOE)
- Data mining of DOE results and mathematical modeling of material-process-property relationships
- Molecular dynamics- and finite element simulation of graphene interaction in polymer matrices at nano/micro-scale



Project consortium

- Four partners from Belgium, Spain the Netherlands and Germany
  - Belgium: KU Leuven, Composite Materials Group
  - Spain: AITEX textile research institute
  - Netherlands: Maastricht University, Aachen-Maastricht-Institute for Biobased Materials (AMIBM)
  - Germany: RWTH Aachen, Institut für Textiltechnik
- Project duration: 36 months
- Project leader: Maastricht University (Prof. Gunnar Seide)
- Involved funding agencies: FWO (Belgium), MINECO (Spain), NWO (Netherlands), DFG (Germany)

Maastricht University

KU LEUVEN

RWTH AACHEN UNIVERSITY

aitex textile research institute

DFG Deutsche Forschungsgemeinschaft

fwo

NWO Netherlands Organisation for Scientific Research

MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD

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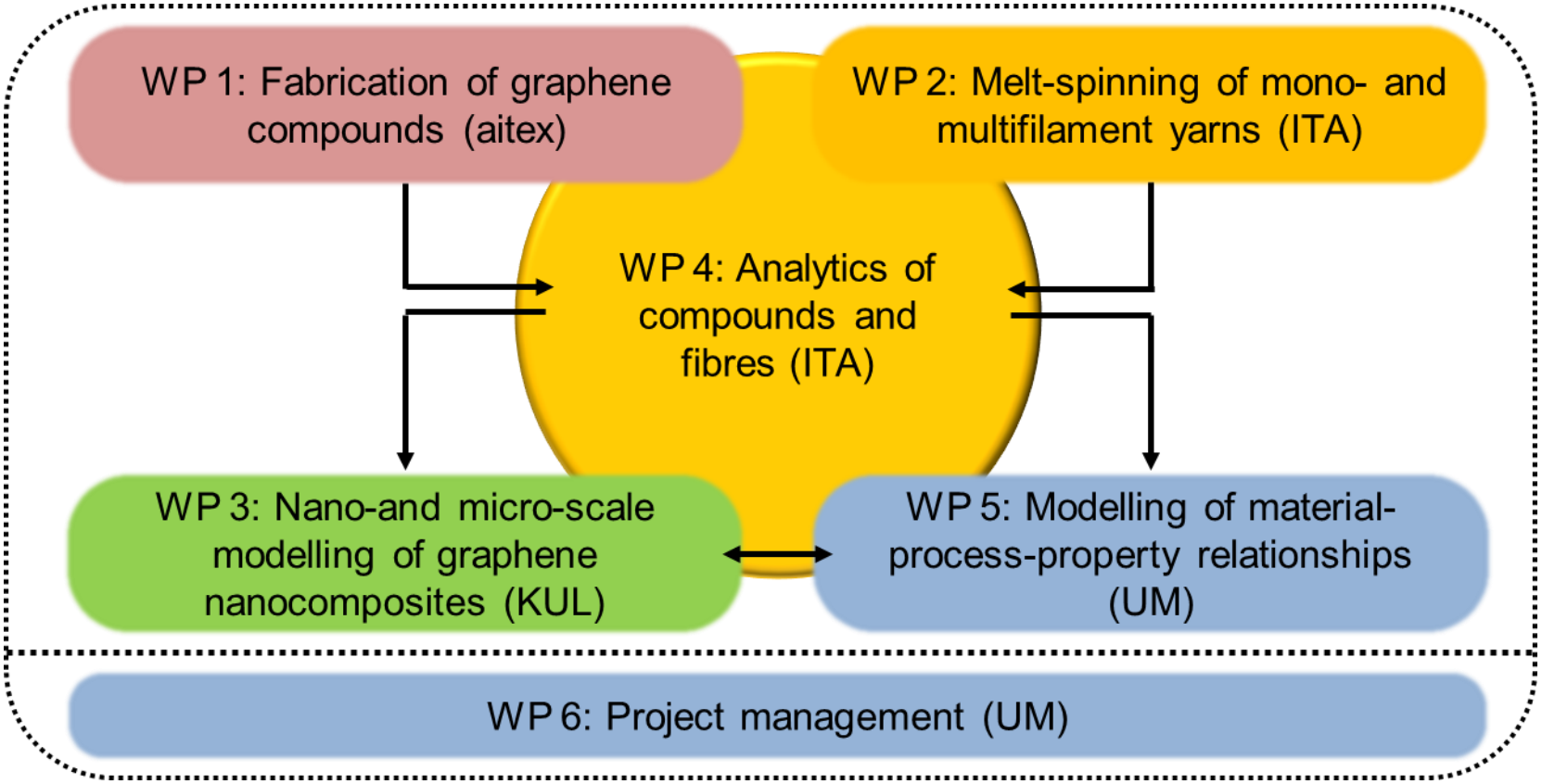
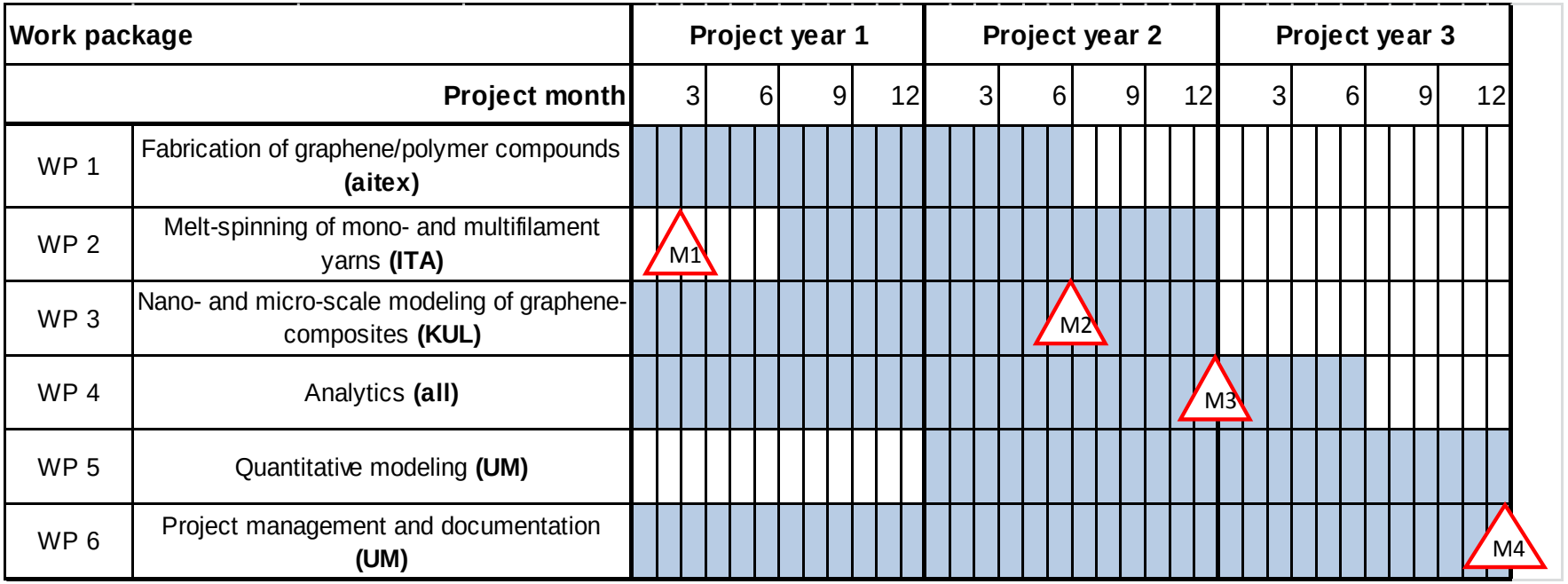
Project overview



Project timeline



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Thank you
for your attention!

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