

# DRD1 Community Meeting WG3: Gas and Material Studies

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# Research Topics and Work Plan

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- 4 major cross areas identified as interest research topics for the DRD1 community in WG3:
  - Gas, Systems, Materials, Long-term operation
- Leading common research topics as from the survey (decreasing selection fraction order, >30%):
  - Ageing, Gas properties, Resistive electrodes, Eco-gases studies, Gas systems, Outgassing, Gas recuperation/recirculation, materials (novel, light), and precise mechanics.
  - Agreement with ECFA DRDT 1.1 —>1.4
- By looking at the results of the survey and the ECFA roadmap, try to identify common projects related to topics in common for several technologies
  - The flagship projects can be identified where there is a major interest coming from the survey/community and where several technologies are involve
  - No explicit deliverables/deadline at this stage
- Various equipments and some infrastructures available at Home Institutions, especially for gas and material studies:
  - External access (maybe) possible --> need to define conditions (common projects/ being part of the same Collaboration/...) and procedures required, Institution by Institution.
  - Share of laboratories and equipments could help the institutes in their researches
- Common facilities needed by the community, to address especially:
  - Ageing studies and Outgassing, radiation hardness and material studies
  - To define specifically the facilities needed together with WG7