Industrial Collaboration with MC2
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An introduction to Companies

Department of Microtechnology and Nanoscience - MC2
Chalmers University of Technology
Göteborg
Sweden
MC2 collaborates with companies in research and innovation

Three models for your company to collaborate with MC2:

1. Advisory
   Give directions for MC2 research

2. Contract
   Research for hire at MC2

3. Joint Venture
   Bring research from MC2 faster to your company
1. Advisory

Give directions for MC2 research

- Bilateral or multilateral projects or centers
- Zero cash costs for company (0%)
- Project results at MC2 owned by individual researcher
- *E.g. SSF centers, Vinnova programs*
2. Contract

Research for hire at MC2

Bilateral projects on strict agreement
Full cash cost for company (100%)
Project results at MC2 owned by company
Confidentiality clauses

E.g. SiC MOSFET project 2002-2006
3. Joint Venture

Bring research from MC2 faster to your company

- Bilateral or Consortium agreements
- Share costs between partners (20-50%)
- Project results at MC2 owned by either Chalmers (for centres) or individual researcher. Non-exclusive license or option offered to companies.

*E.g. GHz Centre, Microwave Wide Bandgap*
MC2 statement to potential industrial collaborators

• MC2 has a mission to transfer knowledge and inventions from Chalmers to our strategic company partners.

• MC2 looks for long-term strategic partnerships with companies which add value and resources to our research environment.

• MC2 is an open research and innovation environment and we are proud to show and highlight our strategic company partners and joint projects.
MC2 strengths in research and innovation

- MMIC design for microwave / mm-wave
- Mixed signal design for high bit rates
- RF power amplifiers
- RF/microwave device modeling
- Wide bandgap technology, devices and circuits: in house GaN MMIC process
- Microwave low-noise devices and amplifiers: in house InP HEMT process
- THz technology: detectors, signal sources
- Fiber optic communication: Parametric amplifiers, optical monitoring
- Semiconductor lasers for optic communication
- Diffractive optics / Liquid crystals
- Micro-technology packaging and integration / Micro- and nano-systems
- Quantum transport and computation, molecular electronics, bionanosystems
- Superconductors: solid state theory, SQUID components and digital RSFQ circuits

Unique Clean Room processes: Microwave, photonic and quantum components
State-of-the-art microwave and photonic characterization facilities

Links: [www.chalmers.se/mc2](http://www.chalmers.se/mc2)  [www.chalmers.se/ghz](http://www.chalmers.se/ghz)
General guidelines for companies interested in collaboration with MC2 (1)

- Find the research area and contact relevant faculty scientist at MC2
- Inform from the beginning the person responsible for Industrial Relations at MC2
- Analyze the situation with respect to:
  - Balance in background knowledge and resources between company and MC2
  - Current MC2 industrial partners
- Select collaborative model from the beginning: this will be decisive for the negotiation, investment and agreement
- Identify potential public sponsors, e.g. public agencies or foundations
General guidelines for companies interested in collaboration with MC2 (2)

- MC2 prefers Joint Venture: many years of experience have shown that this is the most efficient way of transferring results from MC2 to companies which obtain large IPR at a relatively small cost
- MC2 prefers contract research projects > 1 MSEK
- MC2 avoids excessive confidentiality clauses: the exception is in Contract research
- Template agreement for each collaborative model between company/companies and MC2 is handed out on request
- Project can only start after project is signed by Chalmers and company
- MC2 signs agreement with company in Contract or Joint Venture after:
  - Project plan is approved by all partners
  - Each individual researcher at MC2 involved in project has signed an agreement
Contact

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