NSERC-CREATE Collaboration

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Internationally Collaborative Doctoral Programs Webinar
June 22, 2021
Origins – Fraunhofer Project Centre @ Western

- Fraunhofer ICT
- Technology Transfer
  - Composite Materials Research at Industrial Scale
  - Process, Properties, Simulation and Design
- Close ties to KIT for academic research

- 2012 FPC@Western officially opens
- Academic expertise in Canada is distributed
- ICRC forms as a virtual research cluster
  - 15 Researchers
  - 6 Institutions
The Role of the ICRC

ICRC

Network of Academia and Scientific Expertise
Fundamental Research
Technical Education of HQP
Professional Education of HQP

FPC@Western

Expertise on Composite Technologies
Applied Research
Experiential Training of HQP
Technology Transfer to Industry

Composite Materials and Technologies

Industrial Clients
## Major Components of the Training Program

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<thead>
<tr>
<th>Component</th>
<th>Masters</th>
<th>Ph.D.</th>
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<tr>
<td>Professional Skills Program</td>
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<td>Value-Chain Course Modules</td>
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<td>FPC/Industry Internship</td>
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<td>Annual IGS Workshop and Symposium</td>
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<td>International Co-supervision</td>
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<td>International Student Exchange</td>
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Challenges

DFG - IRTG
• Two-year application cycle
• Research and Training
• c. €15M over 9 years
• Expectation of GER/CAN parity

NSERC - CREATE
• One-year application cycle
• Training only
• $1.6M over 6 years
• >50% of ICRC student funding from industrial research grants
  • Fully-funded students
  • Incrementally-funded students
Strengths

• Natural synergy of Canadian and German research strengths
  • Theoretical / Experimental

• Coherent, comprehensive IRTG research program
  • Framework for ‘piecemeal’ Canadian research projects
  • Annual workshops showcase the breadth of the technological issues