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Executive Board

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Position of the Executive Board of Eindhoven University of Technology regarding the assessment of Chemical Engineering & Chemistry

From October 31 to November 22 last year, an international review committee assessed the scientific research of the Department of Chemical Engineering & Chemistry (CE&C) at Eindhoven University of Technology (TU/e) conducted in the reference period 2015-2021. The assessment was carried out using the Strategy Evaluation Protocol 2021-2027 (SEP) for the research assessment of public organizations in the Netherlands.

The committee assessed the research in light of the proclaimed aims and strategies. The committee considered the three main SEP criteria in the assessment: research quality, relevance to society, and viability. Also, the four SEP aspects were incorporated: Open science, PhD policy and training, academic culture, and human resources policy. Upon request, the committee paid special attention to: CE&C in relation to its international position, the extent to which the implementation of the sector plan invigorates CE&C in the Netherlands and how it prepares CE&C for the future.

The assessment committee consisted of:

- o Prof. Johannes Lercher, chairman, Technical University of Munich (TUM)
- o Prof. Katja Loos, University of Groningen (RUG)
- o Prof. Nicolai Cramer, École polytechnique fédérale de Lausanne (EPFL)
- o Prof. Brigitte Voit, Leibniz Institute of Polymer Research Dresden (IPF) and TU Dresden
- o Prof. Em. Guy Marin, Ghent University (UGent)
- o Dr. Marcel Wubbolts, Corbion
- PhD student: Luc Smulders, Utrecht University (UU)



The committee made concrete recommendations for the Department of CE&C at TU/e:

Viability

- The committee highly appreciates the current breadth and depth of the department. In the light of
 the forthcoming changes and challenges, it is recommended to sharpen the focus of activities
 within the three grand challenges (energy, circularity, health) to further strengthen its currently
 high scientific reputation and position in global comparison. Topics should be selected where
 joining forces within the department and in collaboration with existing centers has the most
 impact.
- 2. Enhance visibility of existing strengths and planned research.

Human resource policy

- 3. Develop a clear strategy for recruiting, development, and retention of staff.
- 4. Strengthen the individual career planning, training, and visibility for assistant professors.

Research quality

- 5. Strengthen theory and computational chemistry in the department.
- 6. The committee lauds the plans implementing data science, artificial intelligence, and machine learning and strongly supports establishing a center of competence.
- 7. The committee encourages the department board to obtain a clear timeline for the necessary upgrading of the building infrastructure.

PhD policy and training

8. The committee encourages the installation of PhD mentors without hierarchical relation, in light of social safety.

Societal relevance

9. It is highly appreciated that the department puts substantial effort on sustainability. The committee encourages the department to make it more explicit, e.g. by choosing up to four UN Sustainable Development Goals and link projects to it, further increasing and specifying societal impact.

The Executive Board highly appreciates the work of the committee and the recognition of the excellent quality of the research of Chemical Engineering and Chemistry at TU/e. It is equally appreciative of the concrete recommendations and suggestions of the committee. The Executive Board discussed these with the management of the research unit. A summary of the follow-up actions is attached in appendix 1.

The Executive Board of TU/e has accepted the report and its recommendations and wishes to thank the assessment committee for the considerable time and effort it has spent on this assessment.

On behalf of the Executive Board,

Sinia Venners

Prof.dr. S.K. Lenaerts

Rector Magnificus Eindhoven University of Technology



Appendix 1. A summary of the follow-up actions.

Team 1: shaping career development & PI policy.

- Actions on recommendations 3, 4 and 8.
- Timeline:
 - October 2023 February 2024: shape the policy.
 - March 2024: gradual implementation.

Team 2: implementing clusters structure & setting up management team.

- Actions on recommendations 1, 2, 7 and 9.
- Timeline:
 - o September 2023 March 2024: shape the organizational structure.
 - April 2024: gradual implementation.

Team 3: discussions on setting up chemical engineering within TU/e

- Actions on recommendations 1, 2, 7 and 9.
- Timeline:
 - o 2025: creating an overview of new disciplines and chairs.
 - Multi-year plan: filling new positions.

Team 4: discussions on mapping the materials field within TU/e

- Actions on recommendations 1, 2 and 9.
- Timeline:
 - o 2024 2025 : carry out the exploration and prepare advice.
 - Multi-year plan: filling new positions.