

## Introduction

In the past, the field of polymer science and technology was divided into two distinct topics: polymer production (chemistry) and polymer processing (to generate end-products). Today, however, there is a strong tendency towards 'molecularisation'. Experience has shown that we must be realistic about the degree of cooperation that can be achieved between established scientists from various disciplines. It is clearly important to train newly-qualified scientists and engineers to be able to work in a multi-disciplinary environment. This means educating a new generation of scientists and engineers who can master the ever-increasing complexity of modern polymeric materials, the 'Chain-of-Knowledge'.

For this reason, the national research school PTN (Polymeer Technologie Nederland) developed the RPK ('Register PolymeerKundige') programme in 1993. RPK is a modular post-graduate programme that consists of four modules:

- A. **Polymer Chemistry (6 ECTS)**
- B. **Polymer Physics (6 ECTS)**
- C. **Polymer Properties (6 ECTS)**
- D. **Rheology & Polymer Processing (6 ECTS).**

## Objective

The modular RPK-programme is an innovative tool providing MSc's, PhD- / PDEng-students, post-docs, university staff and industrial researchers with a deeper knowledge of polymeric materials throughout the 'Chain-of-Knowledge'. Invited lecturers from all disciplines of polymer science and technology use review articles and lecture notes instead of standard textbooks. Each module in the RPK-programme is a suitable follow-up study for researchers interested in polymer-based materials.

## Target group and standards

The RPK-programme is designed for engineers, academic and industrial researchers. If you wish to attend the **RPK module A 'Polymer Chemistry'**, you must have a master's degree (or equivalent) in chemistry, chemical engineering, physics or related education. As pre-requisite, basic courses in polymer chemistry at the academic level are strongly recommended.

If you successfully complete RPK Module A, you will be able to understand and assimilate the current literature on polymer chemistry, synthesis and properties. Completing the module in itself is not sufficient to enable you to actively contribute to this field of study, unless you have the appropriate academic qualifications and/or experience (e.g. macromolecular chemistry or polymer synthesis).

## Examination and level

An open-book examination is held at the end of this module. The senior lecturers of Module A will inform you on the procedure during the module. If you have any questions about the starting level for the RPK Module A, please contact the senior lecturers.

## Senior lecturers

Prof.dr. Rint P. Sijbesma / Dr.ir. Hans Heuts  
Eindhoven University of Technology (TU/e)

✉ [r.p.sijbesma@tue.nl](mailto:r.p.sijbesma@tue.nl) / [j.p.a.heuts@tue.nl](mailto:j.p.a.heuts@tue.nl)

## Organisation

PTG/e BV, who works on assignment for PTN, carries out the organisation of the RPK-programme.

PTG/e BV  
P.O. Box 6284  
5600 HG Eindhoven

☎ +31 (0)40 751 76 70

✉ [rpk@ptn.nu](mailto:rpk@ptn.nu)

🌐 [www.ptn.nu](http://www.ptn.nu)





**PROGRAMME**  
**RPK-A 2022**



**POLYMER CHEMISTRY**

<b>01 April 2022</b>	<b>General Introduction &amp; Polycondensation</b> Dr.ir. Hans Heuts (TU/e)
<b>08 April</b>	<b>Anionic &amp; Block Copolymers</b> Prof.dr. Axel Müller (University of Mainz - Germany)
<b>22 April</b>	<b>Radical Polymerization</b> Prof.dr. Dave M. Haddleton (University of Warwick - UK) Dr.ir. Hans Heuts (TU/e)
<b>06 May</b>	<b>Bio- and Biocompatible Polymers</b> Prof.dr.ir. Jan C.M. van Hest (TU/e) Prof.dr.ir. Anja R.A. Palmans (TU/e)
<b>20 May</b>	<b>Metal Catalyzed Polymerizations</b> Prof.dr. Rob Duchateau (RuG & SABIC)
<b>03 June</b>	<b>Vitrimers &amp; Supramolecular Polymers</b> Prof.dr. Filip Du Prez (Ghent University - Belgium) Prof.dr. Rint P. Sijbesma (TU/e)
<b>10 June</b>	<b><math>\pi</math>-Conjugated Polymers</b> Prof.dr. Dirk Vanderzande (University Hasselt - Belgium) Dr.ir. Martijn M. Wienk (TU/e)
<b>17 June</b>	<b>Green/ Circular Polymers &amp; Stimuli Responsive Materials</b> Prof.dr. Zeljko Tomovic (TU/e) Prof.dr. Richard Hoogenboom (University Gent - Belgium)
<b>01 July</b>	<b>Exam RPK-A (open book) 13:00 – 16:00 hrs</b>
<b>26 Aug 2022</b>	<b>Re-sit exam RPK-A (open book) 13:00 – 16:00 hrs</b>

**You must have registered by 15 March 2022 !**  
**The maximum number of participants is limited to 40 persons.**  
**Please Pay Attention: PhD-students who were, due to COVID-19 measures, not able to attend 'RPK 2020' and finish their PhD before Spring 2024 will have the key preference to enroll for RPK A 2022!**

**Details of the programme are subject to change.**  
**All lectures will be given in English.**

**Online registration: [WWW.PTN.NU](http://WWW.PTN.NU)**

## Location and lecture hours

Lectures will be held at the NH Hotel or Jaarbeurs in Utrecht, both situated in the centre of Utrecht, both at walking distance from the Utrecht Central railway station. The lectures start at 10.15 am and finish at 5.00 pm.

## Registration fee & cancellation

The registration fee for RPK Module A, covering instruction, lecture notes and coffee / tea / refreshments (excluding lunch & excluding 21% VAT):

- € 1.650 for PhD-students\*
- € 2.250 for university staff\*
- € 2.500 for industrial researchers
- € 450 for daily participants.

\* only applicable if your university research group is a PTN sponsor.

Cancellation: If we receive notice in writing of your cancellation eight weeks before the beginning of the module, no cancellation fee will be charged. If we receive notice in writing of cancellation four to eight weeks before the beginning of the module, we are obliged to charge 25% administration costs. If you cancel in writing within the four weeks prior to the first day of the module, you will be charged for the full cost of the training. In this case, however, we would be happy to welcome a colleague who would take your place.

## Registration as 'Register PolymeerKundige - RPK'

When you have passed four RPK modules (A, B, C and D) you will be officially registered as a 'Register PolymeerKundige'. Since the introduction of the modular RPK-course in 1993, over 130 participants have obtained the RPK-title. The diagram below shows their number and origin; for more information go to our 'Hall of Fame' at [www.ptn.nu](http://www.ptn.nu).

## References

Akzo Nobel - Arizona Chemical - ASML - Corbion Purac - Colbond - Cordis Europe - Dow Benelux - Draka Kabel - DSM - Evonik - FOM - Forbo - FujiFilm - SABIC - Holland Colours - Hycail - Katholieke Universiteit Leuven - Limburgs Universitair Centrum - Medtronic Bakker Research - Nizo Food Research - Océ Technologies - Philips Research - PTG Eindhoven - Radboud Universiteit Nijmegen - Renolit - Rijksuniversiteit Groningen - RWTH Aachen - Sekisui Alveo - Shell - Solvay - Sonion Nederland - SyMo-Chem - TataSteel - Technische Universiteit Delft - Technische Universiteit Eindhoven - Teijin Aramid - TetraPak - TNO Industrie & Techniek - Universiteit Amsterdam - Universiteit Leiden - Universiteit Maastricht - Universiteit Utrecht - Universiteit Twente - Universiteit Wageningen - Yacht

**The RPK-programme is an initiative and under the auspices of PTN**

