

21st NATIONAL SYMPOSIUM POLYMERS 2025

WITH INTERNATIONAL PARTICIPATION

PROGRAMME



**June 29 to July 02, 2025
Kings' Valley Medical & Spa Hotel,
Kazanlak, Bulgaria**

SUNDAY, 29 June 2025	
14:00 – 16:00	REGISTRATION
16:00 – 16:10	OPENING REMARKS
SESSION 1: Synthesis of Polymers & Macromolecular Engineering Chair: Petar Petrov	
16:10 – 16:55	PL-1: NICOLAY TSAREVSKY Functional branched polymers: Synthetic methodologies and applications
16:55 – 17:30	KL-1: IVAYLO DIMITROV Functional polycarbonate-based polymer architectures for biomedical applications
17:30 – 17:55	OC-1: Aleksey VASILEV "Light-on" polymeric dyes for nucleic acids visualization
17:55 – 18:20	OC-2: Pawel MISIAK Fluorescently labeled cholesterol-based block copolymers as smart drug delivery systems
18:20 – 18:45	OC-3: Ildoo CHUNG Biodegradable and thermoresponsive hollow porous micro/nanoparticles for sustained drug release
19:30	DINNER

PL: Plenary Lecture (40 min + 5 min discussion)

KL: Keynote Lecture (30 min + 5 min discussion)

OC: Oral Contributions (20 min + 5 min discussion)

MONDAY, 30 June 2025	
08:00 – 09:00	REGISTRATION
SESSION 2: Synthesis of Polymers & Macromolecular Engineering Chair: Nick Tsarevsky	
09:00 – 09:45	PL-2: KRZYSZTOF MATYJASZEWSKI Functional materials by macromolecular engineering using Atom Transfer Radical Polymerization (ATRP)
09:45 – 10:20	KL-2: NICOLAS SANSÓN Supramolecular microgels and hydrogels: From design to stimuli-responsive behavior and applications
10:20 – 10:40	NETWORKING AND COFFEE BREAK

SESSION 3: Biomaterials & Nanomedicine Chair: Christo Novakov	
10:40 – 11:05	OC-4: Stanislav RANGELOV Vesicular spherical nucleic acids
11:05 – 11:30	OC-5: Mustafa KOTMAKÇI Synthetic non-viral carriers based on poly(L-lysine) for pDNA delivery: Characterization, activity and preliminary pharmaceutical formulation studies
11:30 – 11:55	OC-6: Darinka CHRISTOVA Surface modification strategies in developing polyethersulfon nanofiltration membranes with improved water-ethanol separation
12:00 – 13:30	LUNCH
SESSION 4: Biomaterials & Nanomedicine Chair: Christo Novakov	
13:30 – 14:15	PL-3: RICHARD HOOGENBOOM A tale of poly(2-oxazoline)s, poly(2-oxazine)s and gene delivery
14:15 – 14:50	KL-3: KENSUKE OSADA Virus-like polymer nanostructures for pancreatic cancer gene therapy
14:50 – 15:10	NETWORKING AND COFFEE BREAK
SESSION 5: Hybrids & Nanocomposites Chair: Natalia Toncheva-Moncheva	
15:10 – 15:35	OC-7: Aleksander FORYS Amphiphilic PEG-containing copolymers as stabilizers of glyceryl monooleate based nanoparticles
15:35 – 16:00	OC-8: Łukasz OTULAKOWSKI Green microwave-assisted method for producing thermoresponsive polymer materials
16:00 – 16:25	OC-9: Dawid SZYMCZUK Magnetic polymer-inorganic hybrids with dual biofunctionalization for colon cancer combined therapy
16:25 – 16:50	OC-10: Viktoriia TALANIUK Triboelectric nanogenerator based on carbon nanotubes-modified polymer composite for low-power electronics
16:55 – 17:00	GROUP PHOTO
17:30 – 19:00	POSTER SESSION 1
19:30	GALA DINNER

TUESDAY, 01 July 2025

SESSION 6: Biomaterials & Nanomedicine

Chair: Olya Stoilova

09:00 – 09:45	PL-4: RUI L. REIS Novel cell/polymeric biomaterials interactions platforms for the elaboration of innovative high-throughput systems and complex 3D <i>in vitro</i> disease models
09:45 – 10:20	KL-4: IVA PASHKULEVA Supramolecular polymers from carbohydrate amphiphiles: Stereochemical effects
10:20 – 10:40	NETWORKING AND COFFEE BREAK

SESSION 7: Hybrids & Nanocomposites

Chair: Sevdalina Turmanova

10:40 – 11:15	KL-5: ALBENA LEDERER Advancement of separation approaches for complex architectures – from single chain nanoparticles to multichain assemblies
11:15 – 11:40	OC-11: Olya STOILOVA Development of bioactive polymer formulations for next-generation plant protection
11:40 – 12:05	OC-12: Mariya SPASOVA Innovative biomaterials loaded with biocontrol agents for sustainable agriculture
12:15 – 13:30	LUNCH

SESSION 8: Hybrids & Nanocomposites

Chair: Stanislav Rangelov

13:30 – 14:05	KL-6: NOBUYOSHI MIYAMOTO Nanocomposite polymers with columnar nanofibers consisting of monodisperse inorganic nanosheets
14:05 – 14:30	OC-13: Milena IGNATOVA Novel electrospun polymeric fibrous materials containing bioactive natural acids: Preparation, characterization, and antioxidant and antimicrobial activity
14:45 – 17:45	SOCIAL PROGRAM
18:00 – 19:30	POSTER SESSION 2
19:30	DINNER

PL: Plenary Lecture (40 min + 5 min discussion)

KL: Keynote Lecture (30 min + 5 min discussion)

OC: Oral Contributions (20 min + 5 min discussion)

WEDNESDAY, 02 July 2025

SESSION 9: Polymer materials

Chair: Elena Vasileva

09:00 – 09:45	PL-5: YOSHIHITO OSADA Future subjects of gel science - inspired from biology
09:45 – 10:20	KL-7: AKIRA KAKUGO Mechanical deformation of microtubules as rails for transport and its impact on cargo dynamics
10:20 – 10:45	OC-14: Charlie MASLEN Cryogenic milling of consumer plastics for high-throughput characterization of polydisperse, amorphous microplastics
10:45 – 11:10	OC-15: Hristo PENCHEV Tailored membrane and hybrid dispersion materials based on polybenzimidazoles and (nano)cellulose for green energy conversion and environmental applications
11:10 – 11:20	AWARDS and CLOSING REMARKS
12:00 – 13:30	LUNCH
14:00	DEPARTURE

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OC: Oral Contributions (20 min + 5 min discussion)