

Developing Science Policy in Occupied and Liberated Europe, 1930s–1960s
The Vienna Conference of the European Academies Research Initiative

Abstracts & Short CVs of the Speakers & Chairs

Johannes Feichtinger | Siegfried Göllner (Austrian Academy of Sciences)

A “Friendly Takeover?” The Liquidation of the Austrian Education and Research System after the “Anschluss”, and its Impact on Science Organization

Following the “*Anschluss*” (annexation) of Austria to the National Socialist German Reich in March 1938, the Austrian state administration was dissolved. An attempt was made to bring the new administration, controlled by central authorities in Berlin, into line with the Reich administration. The Austrian state was divided into “Gau”, with the former state administration now shared between these and controlled by the central authorities. In the field of education and research, the “*Anschluss*” provided the *Reichserziehungsministerium* – the education ministry of the “Third Reich” in Berlin – with their first opportunity to test the centralized administration of an annexed country.

In our presentation, we will give an overview of the restructuring of science organization after the loss of statehood and outline the consequences of centralization (“*Verreichlichung*”). We will show how Berlin took over control of the Austrian educational system and how the “*Anschluss*” affected administrative reform in the “*Altreich*”. How successful was the centralization of higher education and research directed from Berlin? Where else did it prove effective other than in the former Austria? In the case of Austria, the local National Socialists initially perceived the “*Anschluss*” as a friendly takeover. But this perception vanished as it became clear that the opposite was true.

Johannes Feichtinger

Johannes Feichtinger is director of the Institute of Culture Studies at the Austrian Academy of Sciences in Vienna, and teaches modern history at the University of Vienna. He specializes in the history and philosophy of science, history of knowledge and culture studies. He was elected member of the Austrian Academy of Sciences in 2015, and has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Siegfried Göllner

Siegfried Göllner is an associate researcher at the Institute of Culture Studies at the Austrian Academy of Sciences in Vienna. As a historian, he works on various research projects and exhibitions focusing on the politics of memory, National Socialism and Denazification in Austria, as well as youth welfare and sports.

Dieter Hoffmann (MPI for the History of Science/Physikalisch-Technische Bundesanstalt Berlin)

A Hostile Takeover? The History of the Austrian Federal Office of Metrology and Surveying in the period following the “Anschluss” (1938–1945)

The “*Anschluss*” of March 1938 adversely affected the Austrian system of weights and measures and the Federal Office of Metrology and Surveying. The Office was brought into line with the Reich, not only politically but also institutionally. This reorganization served to bring it into compliance with the system and institutions of metrology in Germany, in particular the Berlin Imperial Institute for Physics and Technology (*Physikalisch-Technische Reichsanstalt/PTR*). A political review of the Office’s personnel also followed, exacerbated by dismissals due to the National Socialist racial laws.

This lecture will give the first ever overview and characterization of these intertwined processes of upheaval and change. Key questions will concern the tensions between the continuities and discontinuities of these processes, as well as the extent to which their outcome could be characterized as a “hostile” or “friendly” takeover.

Dieter Hoffmann

Dieter Hoffmann is Emeritus Scholar at the Max Planck Institute for the History of Science (MPIWG) in Berlin. His research is focused on the history of science and physics in the 19th and 20th centuries, in particular biographies and institutional histories. Another focus is science in totalitarian regimes, especially during the Third Reich and in East Germany (GDR). He was elected member of the International Academy of the History of Science in 2001 and the National Academy of Sciences Leopoldina in 2010, and has been a member of the Steering Committee of the European Academies Research initiative since 2018.

Aisling Shalvey (Leopoldina)

“Dethroning the Sorbonne”: *Creating the Reichsuniversität Straßburg and the Nazification of Science in Occupied Alsace*

The *Reichsuniversität Straßburg* was established in 1941 in the occupied territory of Alsace to be a bastion of National Socialist ideology and science. This was a symbolic university in that it created an elite National Socialist rampart in the West, and the construction of its medical faculty and scientific research institutions reflected this. The three-era structure of the *Reichsuniversität Straßburg* will be presented to explain how the Nazification of the university took place in stages. While scientific study there initially seemed quite innocuous, by the end of the war, certain scientific studies conducted in the *Reichsuniversität Straßburg* were in fact war crimes: namely the studies of August Hirt, Otto Bickenbach and Eugen Haagen. This paper will question the impact on students when these scientific researchers were in charge of educating the next generation at the *Reichsuniversität Straßburg*, and to what extent these students absorbed and practiced this Nazified science.

This paper will discuss, in particular, how the Nazified university in Strasbourg reflected external National Socialist policies through the education of its students in the aim of continuing these Nazi science policies. Some key areas of this paper will include courses that the students took as well as their medical theses, and will question how these medical theses were interpreted in the postwar era. This paper will ask how the students practically interacted with this University, which was founded with the aim of furthering Nazi science, and how the student demographic altered as the war progressed. It will finish by examining how students perceived their experience at the university in the postwar era, and in so doing, will expose different levels of cooperation, collaboration, and resistance in Nazi science in occupied regions.

Aisling Shalvey

Aisling Shalvey is the project coordinator and postdoctoral researcher for the “Victims of Nazi Brain Research at the Kaiser Wilhelm Institutes” project, hosted at the Leopoldina. She completed her doctorate at the University of Strasbourg on the topic of paediatrics at the Reichsuniversität Straßburg in 2021, which was funded by the Fondation pour la Memoire de la Shoah. Her book on this topic will be published in June 2023 with Exeter University Press. She was a member of the Historical Commission for the Medical Faculty of the Reichsuniversität Straßburg, 1941–1944, and her work on paediatrics, student theses and pathology was published as part of the final report in 2021.

Piotr Majewski (University of Warsaw)

Secret University: People, Management, Research. The University of Warsaw, 1940–1944: A Case Study

During World War II, the territory of Poland was occupied by the “Third Reich” and by the Soviet Union. After the invasion of the Soviet Union by Nazi Germany in June 1941, the “Third Reich” occupied the entire area of pre-war Poland, including all centres of scientific and academic life. In accordance with the principles of Nazi cultural and educational policy in the occupied territories, the education of Polish society was limited to the minimum level. In response, Polish scientific communities, acting with the support of systematically expanded structures of the Polish Underground State associated with the Government of the Republic of Poland in Exile, began the process of creating an underground education system.

This paper will present this process using the example of the largest Polish university, the University of Warsaw, with particular attention to the following issues: (1) the characteristics of the environment of Polish scholars (mainly humanists) involved in creating the structures of the underground university, taking into account their motivations and living conditions; (2) the organization, management and financing of the structures of the underground university, including – (3) the organization of the teaching process itself, the creation of a curriculum and a model for the verification of learning outcomes and research results.

Relations between academic teacher and student, as well as the issue of maintaining academic freedom in the realities of the oppressive system of occupation, are also of interest here. In addition, we will discuss repressive actions taken by the occupying authorities, including examples of destruction and confiscation of research workshops (in libraries), while at the same time highlighting examples of heroic behaviour in scientific circles (e. g. during and following the Warsaw Uprising of August – October 1944).

The issues addressed in this study are part of the author’s research interests in the history of culture and cultural institutions in Poland after 1918.

Piotr Majewski

Piotr Majewski is affiliated to the Office of Historical Research at the Institute of National Remembrance and the Faculty of Humanities of the Cardinal Stefan Wyszyński University in Warsaw, where he currently heads the Department of Culture Management. His research interests involve cultural and scientific institutions in Poland after 1918, including issues of management. He is on the board of a number of periodicals (e.g.: *Kwartalnik Historii Nauki i Techniki* [Quarterly Journal of the History of Science and Technology]) and cultural institutions (e.g.: Museum of the Second World War in Gdansk), and is a member of the Polish Institute of World Art Studies Association.

Keynote

Mitchell G. Ash (University of Vienna)

Science Policy Changes in Times of Political Upheaval

The number and complexity of political regime changes in Europe during the interwar period has been a topic of research in general history and other fields for decades. Science and higher education policy were clearly also implicated in these political upheavals, but the precise relationships at work have been studied only incompletely. Single-nation studies continue to prevail in this field, despite the desirability of comparison and the transnational dimensions of the topic made especially evident by the forced migrations of scientists and scholars for political reasons. The task of this paper is to stimulate further comparative and international discussion of the interrelations of science policy and general politics during radical regime changes.

The thesis defended here is that at the moment of power transfer the situation is fundamentally fluid; BOTH what will count as science AND what politics will become are unclear at first. The relationships of science policy and general politics in such circumstances must therefore be regarded as results of complex negotiations with multiple participants. In such fluid situations, domination of science policy by power politics and ideology is only part of the story. Purges of academics, for example, were ordered for political or racist reasons and were NOT acts of science policy as such. At the same time, science policy actors also attempted to present themselves, their ideas and the institutions they led as resources for the new regime in question, in exchange for career opportunities and research support. At times they even tried to enact policy in their own right, usually without success. Examples of how these processes work will be drawn from multiple regime changes during this period, with the aim of determining what is specific to democratic, Communist, Austrofascist or Nazi regimes, and what may be characteristic of such regime changes in general.

Mitchell G. Ash

Mitchell G. Ash is Professor Emeritus of Modern History at the University of Vienna, and a full member of the Berlin-Brandenburg Academy of Sciences and Humanities as well as the European Academy of Sciences and Arts. He is author or editor of 20 books and nearly 200 articles and book chapters on the relations of the sciences and humanities with culture, society and politics in the 19th and 20th centuries, most recently the edited volume *Science in the Metropolis: Vienna in Transnational Context, 1848–1918* (New York 2021). His current research is focused on the historical interactions of the sciences and humanities with politics in German-speaking Europe in the 20th century; a book in this field, *The Max Planck Society in the Process of German Unification (1989–2002)*, will be published in fall 2023. In 2018, he was awarded the Bernard Bolzano Medal by the Society for the History of Science and Technology of the Czech Republic for his long-standing support of historians of science and technology in the Czech Republic.

Michal Šimůnek (Czech Academy of Sciences) | **Miloš Hořejš** (National Technical Museum Prague)

A New Infrastructure for the New Reich: On Contexts of the First Oil Pipeline in Bohemia and Moravia, 1941–1945

Apart from the unprecedented extent of repression, the main shift in the field of scientific research brought about by the German occupation of the Czech lands consisted in an emphasis on applicability and interconnection with industry. These aspects have not been accorded adequate attention thus far, even though substantial steps were taken by the Nazi decision-makers in this period towards building a brand-new infrastructure incorporating significant scientific components and expertise. One typical case, which is as yet almost unstudied, is the sphere of oil policy. The Protectorate of Bohemia and Moravia came under the remit of the “Economic Research Society Ltd.” (*Wirtschaftliche Forschungsgesellschaft mbH*; WiFo), founded in Germany in 1934 with the task of managing, designing and proliferating strategic fuel infrastructure.

The largest WiFo project in the Protectorate was the construction of a storage and transportation terminal in Hněvice (Hniewitz) near Roudnice nad Labem (Raudnitz). It was here that the first oil pipeline (*Ölleitung*) on Czech territory was to be laid from Vienna, as well as a product pipeline from the synthetic-fuel production plant under construction in Záluží u Mostu (*Maultheuern*). The complex in Hněvice was internally referred to as the Roudnice Reloading Point (*Umschlaglager Raudnitz*). The plan was that oil from Romania would be transported to Roudnice in tankers (*Tankschiffe*) along the Danube to the inland port at Vienna-Lobau. The Most – Roudnice nad Labem and Roudnice nad Labem – Vienna lines were designed as a unified system consisting of sections (*Strecken*) marked with capital letters. The project received absolute priority: the work was started and the pipework even seems to have been laid by the end of the war.

Michal Šimůnek

Michal V. Šimůnek is a researcher at the Czech Academy of Sciences in Vienna and also cooperates closely with the National Technical Museum in Prague on a number of projects. He specializes in the history and philosophy of science and science policy in the Czech Lands and Czechoslovakia in the 19th and 20th centuries. Currently he is a member of the Lancet Commission on Medicine and the Holocaust and of the board of the Czech Society for the History of Science and Technology.

Miloš Hořejš

Miloš Hořejš studied history and political science at the Faculty of Philosophy of the Charles University in Prague. Since 2008, he has been chief manager for science and research at the National Technical Museum (NTM), Prague. His fields of expertise include, in particular, the history of science, economy, and architecture in the Czech Lands. He is also a member of the science and research board of the Ministry of Culture of the Czech Republic.

Christophe Eckes (Université de Lorraine)

Recruiting French Mathematicians for the Zentralblatt and the Jahrbuch: An Example of Nazi Scientific Policy in Occupied France

The *Jahrbuch über die Fortschritte der Mathematik* (1868–1942) and the *Zentralblatt für Mathematik und ihre Grenzgebiete* (which was created in 1931 and exists to this day) were the two major reviewing journals in pure and applied mathematics in Germany. Although the fate of these two journals under the “Third Reich” has already been studied in detail by the historian of mathematics Reinhard Siegmund-Schultze in the early 1990s, the political uses to which these two journals were put in occupied France (1940–1944) still need to be examined more closely.

The *Jahrbuch* and the *Zentralblatt* were jointly managed from 1939 onwards by the *Preußische Akademie der Wissenschaften* and the *Deutsche Mathematiker-Vereinigung*. From the beginning of 1940, the direction of these two journals was taken over by the Nazi mathematician Harald Geppert (1902–1945). The latter was commissioned by the *Reichserziehungsministerium* in the autumn of 1940 to recruit French mathematicians to work as reviewers for the *Zentralblatt* and the *Jahrbuch*. Geppert was supported in this by the mathematician and academician Gaston Julia (1893–1978), who at that time supported collaboration with Nazi Germany.

In this paper, we will show that the scientific policy coordinated by Geppert must be studied in the light of several factors: (i) Firstly, it was an imperialist policy that aimed to shift the scientific center of gravity from Paris to Berlin; (ii) secondly, it was coordinated with Julia’s unwavering support and was directed preferentially to mathematicians who were close to him and who worked in the occupied zone; (iii) thirdly, it was carried out on the basis of quid-pro-quo arrangements promised by Geppert in favor of mathematicians who were prisoners of war in Oflag. For example, the mathematician Jean Leray, who was held in captivity in Oflag XVII A, agreed to work from his officers’ camp as a reviewer for the *Zentralblatt*. In return, he obtained the right to unlimited scientific correspondence, in particular with the topologist Heinz Hopf (Zürich).

We will establish that Julia tried in vain to formalize his commitment to collaboration at the Académie des Sciences in July 1942. In spite of his public statements in favor of the scientific policy of the occupying power, following the Liberation of France he benefited from the inertia of all the scientific institutions of which he was a member: the Académie des sciences, the Faculty of Sciences of Paris, and the École Polytechnique. It was not until the fall of 1954 that his pro-collaboration efforts were denounced by the Évariste-Galois cell of the French Communist Party, located at the Henri-Poincaré Institute and composed of physicists and mathematicians such as Jean-Pierre Kahane, Michel Lazard, Jean-Pierre Vigier and Marianne Teissier-Guillemot.

Christophe Eckes

Christophe Eckes is assistant professor at the Archives Henri-Poincaré (Université de Lorraine – CNRS), specializing in the history and philosophy of mathematics. Part of his research is devoted to the mathematical sciences under the Occupation. He has been a member of the history of science section of the Comité des travaux historiques et scientifiques (CTHS, École nationale des Chartes) since 2021.

Karl Grandin (Royal Swedish Academy of Sciences)

Belligerent Suitors – Scientific Courtship in the Middle of the War: The Royal Swedish Academy of Sciences in 1943

During the war years, international scientific collaboration became increasingly difficult. As a physicist in Stockholm lamented: “The isolation directed against most European countries and practically all non-European countries has become almost total. The task that should primarily be the responsibility of a Nobel Institute, the careful assessment of new discoveries and inventions, can no longer be carried out.”

In 1943, however, Sweden received visits by several scientists from the belligerent countries. Both sides in the war were apparently anxious to preserve their connections with Swedish scientists. Max von Laue came in March, as well as F.A.E. Crew; Lawrence Bragg came a month later, and a further month saw a visit by Max Planck. They all visited the Royal Swedish Academy of Sciences in Stockholm. Von Laue (Germany) and Crew (Great Britain) even attended the very same meeting of the Academy. This might be seen as an appealing instance of neutral science above politics. But that is, of course, not the full story. Naturally, it is hard to assess to exactly what extent its association with the Nobel Prizes in physics and chemistry led both belligerent sides to court Swedish science.

After returning to Germany, von Laue was reprimanded by a Nazi official for having mentioned the theories of relativity during a talk in Stockholm without stating “that German research expressly distances itself from Einstein’s theory”. This is an obvious example of visiting scientists being monitored while abroad. The British Council, which oversaw both Crew’s and Bragg’s trips, can be understood as a propaganda organisation and a soft-power extension of British foreign policy. But the scientists were not merely pawns; they had great confidence in their present and future roles. During his visit, Crew said of the coming post-war period: “The direction of [...] the world must be [...] directed towards a development that science dictates [...] The military union of the Allies must be followed by a political one after the war [...] It is the great task of the scientists to be involved in that work. They will no longer simply be asked for their opinion by the ruling politicians, but science will direct the development.” This is quite a confident remark on the future role of science and scientists. In this paper, we will delve deeper into these visits and how they were perceived by Swedish scientists, as well as whether they affected how these scientists imagined their role both during and after the war.

Karl Grandin

Karl Grandin is director of the Center for History of Science at the Royal Swedish Academy of Sciences in Stockholm. His international collaborations have mostly dealt with scientific heritage and digital projects. He chairs the History of Physics Group and the Historic Sites committee of the European Physical Society, and is editor of the Nobel Foundation yearbook. He has been a member of the European Academies Research Initiative since 2018.

Céline Fellag Ariouet (Université de Lorraine)

The International Bureau of Weights and Measures (BIPM) 1933–1960: An International Scientific Organization near Paris, from the Rise of National Socialism to Postwar Reconfigurations

The International Bureau of Weights and Measures (BIPM) is one of the oldest international organizations. It was established on 20 May 1875 in Paris by the signature of a treaty intended to ensure the international unification and the improvement of the Metric System and known since then as the Metre Convention.

Germany and France were among its founding states, and German astronomer Wilhelm Foerster (1832-1921), who took an active part in the work of the Metre Commission, played an important role in its creation. Foerster was the second President of the International Committee for Weights and Measures (CIPM), the executive board of the BIPM, from 1891 to 1920. The BIPM worked closely with the German metrology institute, the *Physikalisch-Technische Reichsanstalt (PTR)*, from its creation in 1887. After the First World War, the Metre Convention was included in Section II of the Treaty of Versailles in Article 282 concerning treaties to be “applied solely between Germany and those of the Allied and Associated Powers which are parties to it”. From 1933 onwards, the BIPM observed the changes taking place at the PTR and the influence of National Socialist policy on the ways in which international scientific cooperation was approached. From 1933 to 1945, the PTR was fully involved in reshaping of German science in the interest of the “greatness” of the Third Reich. In 1940, the International Bureau of Weights and Measures was one of the few international organizations to have its headquarters in the occupied zone and was among the international scientific institutions that were thoroughly scrutinized by the *Militärbefehlshaber in Frankreich (Mbf)*. Throughout the war, the BIPM came under pressure by the German Military Command and the National Socialist government; the PTR President, Abraham Esau (1884-1955), supported by Wilhelm Kösters (1876-1950), member of the CIPM since 1921 and Head of *Abteilung I* of the PTR, were charged by the *Reichsminister für Wissenschaft, Erziehung und Volksbildung* with setting up plans to revise the Metre Convention and transfer the headquarters of the BIPM to Berlin.

This paper will examine Nazi science policy plans for the BIPM, the strategies used for adaptation and governance purposes inside the BIPM, and how these were continued and, conversely, disrupted during the period of occupation. It will also highlight the post-war reconfiguration, the consequences of this period on scientific cooperation, and how this affected the major orientations during the following decade.

Céline Fellag Ariouet

Céline Fellag Ariouet is head of the Meetings and Executive Office at the International Bureau of Weights and Measures: BIPM. She is currently completing a PhD thesis in history of science at the University of Lorraine on “The International Bureau of Weights and Measures from 1875 to 1975”, under the supervision of Dr Martina Schiavon. She has participated in several research projects and published a dozen articles.

Viktoriya Sukovata (V. N. Karazin Kharkiv National University)

Soviet Science and Scientists during World War II: Challenges and Achievements

In examining the contribution of scientists in the countries of the anti-Hitler coalition to the victory over Nazi Germany, contemporary researchers underline that the victory was made possible, to a large extent, by the rapid mobilization of science in the United States and Great Britain. The allied states established close links between scientific institutions and industry. The time from the invention of new weapons and drugs to their pilot production and subsequent military use was shortened as much as possible.

It is well known that Western scientists made a number of significant discoveries in physics, chemistry, medicine, and cybernetics during World War II, such as radar, encryption machines, antibiotics, and new synthetic materials. However, the contribution of the Soviet scientists and science to the Soviet victory over Nazism remained practically unknown in the West for a long time. There are several reasons for this: During World War II, all scientific developments that served military purposes were kept top secret, often for decades, until the collapse of the Soviet Union.

During the Cold War, all scientific research of strategic importance was also classified as secret, and the scientists themselves were under the strict supervision of the KGB. They were not allowed to travel abroad, and it was a long time before they were able to act as public figures. The strict secrecy that surrounded Soviet scientists and their discoveries was not only for political and military reasons. From the mid-1930s to the mid-1950s, a significant proportion of Soviet designers, engineers, mathematicians and researchers in the field of applied sciences worked in “sharashki”. “Sharashki” were the secret scientific laboratories, even large facilities, that formed part of the system of the NKVD-KGB. Here, scientists and workers had the status of prisoners, albeit “privileged prisoners”. They had no rights except the right to work in their scientific or applied field. At the same time, however, their material conditions were much better than those of the ordinary Soviet population during the war. The scientists in these “sharashki” lived in relatively comfortable rooms in “hostel” conditions, and they received state prizes, freedom, and even state awards for successful inventions and their applications. Many scientists who were released from the “sharashki” later reached the highest levels of the Soviet elites.

In my presentation, I would like to report on the most important Soviet inventions of the war period, the fates of scientists, as well as the forms of mobilization of Soviet science during the war period and the people who supervised them. In particular, I will report on the discovery of penicillin by the Soviets and the development of the first multiple “Katyushka” rocket launcher, nicknamed “Stalin’s pipe organ” by German soldiers during the war. Since it is impossible to list all the discoveries and industrial developments made by Soviet scientists during World War II, even briefly, I will focus on just some of them. First and foremost, I will talk about those scientists and inventions that gained great popularity in Soviet post-war culture in cinematic and literary representations; the topic of scientists and their achievements was a popular one in Soviet mass culture from the 1960s to the 1980s.

Viktoriya Sukovata

Viktoriya Sukovata is a PhD and Doctor Habilitus in Cultural Studies and a professor at Kharkiv National Karazin University in Ukraine. Currently she is a fellow of the Leibniz Institute for Jewish History and Culture – Simon Dubnow in Leipzig, Germany. She specializes in Jewish and Holocaust studies, and Soviet and post-Soviet history. She has published chapters in ten collective monographs, and more than 180 articles in German, Ukrainian, Polish, Belorussian, Russian, Georgian, Latvian, Serbian, Slovak, Italian, Luxembourgish, Brazilian, Swedish and American academic journals. She has been awarded a number of fellowships at international research centers, including the Institute for War Documentation (Amsterdam, Netherlands), the Institute for Contemporary History (Munich, Germany), and the Kennan Institute (Washington DC, USA).

Erki Tammiksaar (Estonian University of Life Sciences)

German and Soviet Science Policy and Science in Estonia from the 1920s to the 1960s

Several new nation-states emerged on the map of Europe as a result of the First World War. One of these was the Republic of Estonia. As Estonians had never had their own state before, the establishment of a parliamentary republic, its institutions and a new national identity was a big challenge for its small elite. Their primary ambition was to do things differently from the previous (Baltic) German and Russian rulers.

In 1919, the university of Tartu was reopened as an Estonian university, within which both the Estonian science and Estonian scientific terminology were to be developed. Since this was a poor, agriculturally oriented country, all fields from theology to agricultural and technical sciences had to be developed at the university, which also fulfilled the functions of the Academy of Sciences at the time. In such conditions, it was difficult to comply with the developmental interests of all these different fields. The economic crises of the early 1930s emphasized the need for a technical university in order to increase Estonia's national wealth. This was further underlined by an Estonian-German agreement signed in 1935 to supply the German navy with Estonian shale oil; shale oil research, in particular, became a priority. In 1936, under government pressure, the Tallinn Institute of Technology was created on the foundations of the Department of Technical Sciences and Chemistry of the University of Tartu. From that time on, the task of the University of Tartu was to focus on the development of the national sciences.

The first Soviet occupation (1940–1941) and the subsequent German occupation (1941–1944) were too short-lived to change the established research organization and research traditions in Estonia. At the same time, Estonian scientists were forced to cooperate with both sides. Accordingly, on the eve of the restoration of Soviet occupation in 1944, they were forced to choose whether stay in their homeland or to flee into exile.

Before the Second World War, Soviet higher education and research policy was shaped by the union republics themselves. The level of research and education was therefore very diverse. During World War II, however, the infrastructure of higher education institutions in the western part of the USSR, including Estonia, was severely damaged. In 1946, the Ministry of Higher Education of the USSR was created, and most of the higher education institutions of the federal state were subordinated to this new ministry. The aim was to raise the level of teaching and research, but also the level of ideological work in the Cold War context. Political campaigns directed against different fields of science in the Soviet Union (e.g. Michurinist biology) also affected the Estonian universities as well as the institutes of the Academy of Sciences, which was founded in 1947. As a result of these campaigns, Estonian scientists were forced to be – or at least to act – loyal to the Soviet government.

Khrushchev's rise to power, the thaw in relations with the capitalist world and the improvement of the economic situation, followed by the reform of higher education and research in the Soviet Union and the strengthening of scientific competition, had a favorable effect on the development of Estonian science. Ultimately, the natural sciences underwent a rapid development in Estonia. Today, this field – especially information technology – has attained a very high level.

Erki Tammiksaar

Erki Tammiksaar is senior research associate at Tartu University and the Estonian University of Life Sciences. He teaches history of geography at Tartu University. Tammiksaar specializes in the history of science and history of industry. In 2016, he was elected corresponding member of the International Academy of the History of Science.

Annalisa Capristo (Centro Studi Americani, Rome)

Reknitting “the Ties Broken by the Storm”? Italian Scientists and the Consequences of Anti-Jewish Persecution Before and After 1945

Fascist Italy was, along with Nazi Germany, one of the leading players in anti-Jewish policy in Europe during the 1930s. The academic and scientific sector was severely affected by the racist measures implemented in 1938; the percentage of professors dismissed from their jobs was the highest in the entire Italian civil service. The consequences of this persecution for students and young people at the beginning of their careers remain uncalculated, and indeed difficult to calculate. Despite the difficulties and restrictions that stood in the way of emigration, many persecuted scientists and scholars managed to leave Fascist Italy and find employment abroad. After the war, only a small proportion of those who had emigrated chose to return to the country that had banned them, and that was now engaged in a complex transition from dictatorship to democracy. The repercussions of anti-Jewish persecution in the scientific sphere were profound, both before and especially after the end of World War II. In this paper, I aim to address some questions that are particularly relevant on a transnational level, for Europe and beyond. To what extent did the persecutions and subsequent emigration affect the Italian scientific milieu? How did the academic establishment react to the exclusion of Jewish colleagues and then, after the Liberation, to their reintegration into scientific life? What was the attitude of scientific circles abroad (particularly in the US and UK) toward Italian colleagues, Jewish and non-Jewish? How strongly did the lack of a post-war purge weigh in scientific and academic circles, and what consequences (and lack of consequences) were there for those scientists who contributed to the persecution? How did Jewish scientists, many of whom had complied with the Fascist regime before 1938, react before and after 1945?

Annalisa Capristo

Annalisa Capristo is librarian at the Center for American Studies in Rome, and currently teaches contemporary Jewish history within the BA program offered by the Union of Italian Jewish Communities (UCEI). Her research focuses on Fascist antisemitism and racism, on which she has published several books and articles. She is a member of the Centre for the History of Racism and Anti-Racism in Modern Italy, Genoa.

Martin Franc (Czech Academy of Sciences)

The Era of the Protectorate of Bohemia and Moravia and its Influence on the Postwar Organization of Non-University Academic Institutions

During the occupation of Czechoslovakia and World War Two, Czech science was crucially influenced by the closure of Czech (i.e., Czech-speaking) universities by the occupying Nazi authorities on 17 November 1939. This was done in response to the extensive participation of students in anti-occupation protests at the end of October, and the funeral on 15 November 1939 of a student who had been seriously wounded in the October demonstrations. After the closure, some lecturers were forced to retire, some went on to teach at secondary schools, and some were allowed to continue at various academic or research institutions such as the State Institute of Public Health. At the same time, however, a group of mostly younger scientists – previously employed as assistant lecturers or assistant professors at universities – went into private research. These were usually chemists, technologists, or doctors and pharmacologists. The Czech lands also organized professional training of students via courses held at secondary technical schools, albeit on a substantially smaller scale than in Poland, for instance. The disruption of hierarchical academic structures, the specific conditions of the often semi-legal or illegal work, and the environment of capitalist industrial enterprises focused on practical results enabled quicker growth for these ambitious young academics who, after the war, would play an important role in Czech non-university institutions. They could quite often also rely on sophisticated plans made during the occupation by members of the resistance. Unlike the older, established generation, these young scientists were exposed to less pressure to collaborate with the occupying forces, something that came to burden some older professors and complicated their future careers. Specific conditions, such as the efforts of some Czech patriots to help as many young people as possible avoid forced labor in Germany, also led to new forms of academic work in large teams, which in turn influenced the establishment of new academic institutions outside the universities. This model was also contributed to by work on specific large-scale research tasks that had to be completed on a short timeline, whether for use by the war industry or the post-war renewal of the country. Even though the establishment of the Czechoslovak Academy of Sciences as the key scientific institution is viewed primarily as a manifestation of the Sovietization of academic structures, the experience gained by the academic community during the era of the Protectorate of Bohemia and Moravia was perhaps even more important in shaping its real, future organization.

Martin Franc

Martin Franc is head of the Department of History of the Academy of Sciences at the Masaryk Institute and Archives of the Czech Academy of Sciences, and teaches at the Faculty of Humanities at Charles University in Prague. He works on the history of nutrition and food in the 18th to 20th centuries, the history of lifestyle after 1945, the social history of science in the 19th and 20th centuries, and the history of the Czechoslovak Academy of Sciences. He has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Georgy S. Levit (University of Jena)

From the Third Reich to the GDR: Surviving Totalitarian Regimes as Hangers-On

There are several strategies to survive and, eventually, prosper within a totalitarian regime. The most promising option for obtaining maximum benefit from the regime seems to be accepting the mandatory ideology, joining the dominant political movement, and actively participating in all enterprises of the political regime. This strategy, however, holds great perils, as after the inevitable breakdown of the regime, its active supporters must also share responsibility for its political crimes.

The opposite strategy is active resistance to the regime. This promises success in a potential post-totalitarian future, but involves deadly risks in the present.

The best option in terms of surviving both a current totalitarian regime and a potential post-totalitarian future or regime change appears to be a “follower” or “hanger-on” strategy: i.e., passive acceptance of the dominant ideology, giving access to resources without active participation in the regime’s criminal enterprises.

I will analyze this third option using the example of “non-public” scientists, who survived the Nazi regime and, directly afterwards, transitioned seamlessly into the totalitarianism of the GDR. I use “non-public” scientists to mean researchers who were prominent within their narrow disciplines, but who were not public figures.

I will reconstruct the careers of three different scientists, to illustrate all the shades of grey within the hanger-on strategy.

One well-known nutrition scientist and military administration official, Wilhelm Ziegelmeier, is an example of a “non-participant hanger-on”: somebody who tried to adapt to the Nazi regime without joining the NSDAP, and who even offered some resistance using legal options. Ziegelmeier tried to pursue the same strategy in post-war East Germany.

A prominent veterinary scientist, Viktor Goertler, represents the second option. Goertler joined the Nazi party (NSDAP) early on, but remained “a member without functions” and committed no crimes. Following the regime change, he joined the Socialist Unity Party of Germany (SED) and continued his scientific career. Goertler was a “passive follower” who tried to use the resources of both regimes without taking part in criminal actions.

The darkest side of grey will be shown in the example of the nutrition scientist Arthur Scheunert, who joined the NSDAP and made exhaustive use of the resources of the Nazi regime, reaching the final boundary between international legality and criminality. Scheunert is known for conducting nutrition experiments on prisoners during the Nazi period. His experiments are definitely unscrupulous from the current viewpoint but, at the time they were conducted, still belonged within the international legal “grey zone”. After World War II, Scheunert went through denazification, was officially classified as a “follower” and scientifically prospered in the GDR, where he became a National Prize Winner.

Georgy Levit

Georgy Levit is a lecturer (*Privatdozent*) at the Faculty of Biology of Friedrich Schiller University Jena. He specializes in the history and philosophy of biology, history of nutrition science, and history of veterinary medicine. He has published widely on the history of science under totalitarian regimes.

Sven Widmalm (Uppsala University)
Neutral Science Policy: The Case of Sweden

As in many other western European countries, research policy in Sweden from World War II to the end of the 1960s was part of a modernization process founded on two pillars: exceptional economic growth, and the conviction that science and technology would lead to material progress that would enable the fulfilment of political promises to provide general welfare. Unlike much of Europe, however, military non-alignment – often discussed in terms of “neutrality” – was also a constitutive element of Swedish research policy both during and after the war.

In March 1941, a government commission visited a few European countries to acquaint themselves with their systems for research funding. Members of the commission were especially enthusiastic about the German system, such as the *Reichsforschungsrat*, claiming that it provided a fine example of academic freedom. The Swedish Technological Research Council was established in 1942, partly on the German model. In the autumn of 1945, a Science Research Council was established, despite doubts among some parties that this would itself endanger academic freedom. Its proponents said that this was not the case, as freedom-loving countries like the US and the UK also had research councils.

Modern research policy was therefore established in a context of wobbling neutrality – from a fairly subservient attitude to Germany to a break in late 1943 with the Nazi regime. This reflected the *Realpolitik* of a militarily weak neutral country led mostly by anti-Fascist Social Democrats, but with elements of strong admiration for Nazi Germany remaining among the political, military, scientific, and economic elites. After the war, Swedish neutrality was oriented towards close collaboration with the US (including clandestine military cooperation). Through a series of conferences and the development of close ties with some leading scientists, the government forged a research policy similar to the American one. There was a strong emphasis on defence (reflecting the new policy of “armed neutrality”) and nuclear power (keeping the option of developing thermonuclear arms open until 1968), and, from the mid-1960s, collaboration in R&D including with the USSR. The latter reflected a new turn in the policy of neutrality, which was now becoming more activist, including sometimes sharp criticism of the US (over the Vietnam War) but also of the Soviets (over the invasion of Czechoslovakia). This reorientation was mirrored by a growing commitment to fund peace research, R&D in developing countries, and the social sciences relevant in those contexts. The humanities were, however, largely absent from the radar of Swedish research policy in these years.

Sven Widmalm

Sven Widmalm has been professor of History of Science and Ideas at Uppsala University since 2010. He was previously professor of Technology and Social Change at Linköping University. His latest research has dealt with intellectual exchange between Sweden and Germany during the Third Reich, and international scientific conferences (in particular Nobel Symposia) in the 1960s and 1970s.

Dragomir Bondžić (University of Belgrade)

The Development of Nuclear Science in Yugoslavia after the Second World War (1945–1960)

The communist leadership in Yugoslavia after World War II had ambitious plans in the field of nuclear science. Despite the poverty of the country, the underdevelopment of the economy and science, and the lack of scientific infrastructure, experts and experience, there was a strong aspiration to start nuclear research for peacetime purposes. Above all, the Yugoslav leadership counted on help from its great ally – the Soviet Union. This is why Pavle Savić, a prominent Serbian scientist and pre-war assistant of Irène Joliot-Curie in Paris, stayed in Moscow twice from 1944 to 1946, where he asked for help to build a nuclear institute in Yugoslavia.

However, further development in this area also depended on Cold War international conditions. After the Tito-Stalin split in 1948, Yugoslavia could no longer expect scientific help from the Soviet Union. Nevertheless, an ambitious nuclear research project was launched. As early as 1948, a nuclear institute was established in the village of Vinča near Belgrade. For the sake of balance between the Yugoslav republics, an institute was also established in the Slovenian capital Ljubljana in 1949, and in 1950 another institute was founded in Zagreb, the capital of Croatia. The work of all three institutes was under the strict control of state authorities. In March 1955, the Federal Commission for Nuclear Energy was established; this commission directed, coordinated and controlled all activities in the field of nuclear research.

Significant results were achieved in the course of the 1950s. In the beginning, the greatest efforts were focused on the discovery of nuclear raw materials, primarily uranium. Over time, knowledge spread, new instruments and plants were supplied, and experts were trained at the Yugoslav universities as well as at prominent European scientific centers. In the mid-1950s, cooperation with the Soviet Union was renewed, which led to the construction of a research reactor at the Vinča institute in 1959.

The aim of this presentation is to review the initiation and development of Yugoslav nuclear science in the period of its rise until 1960, in the context of the Cold War and within the framework of the relations between republican centers in Yugoslavia.

Dragomir Bondžić

Dragomir Bondžić is Principal Research Fellow at the Institute for Contemporary History in Belgrade. He deals with the history of Yugoslavia and Serbia in the 20th century, with a particular focus on the history of education, higher education, science, international scientific-educational cooperation and nuclear policy after World War II. He has published seven monographs and about 130 articles and 60 reviews in scientific journals. He is editor-in-chief of *History of the 20th Century*, the journal of the Institute for Contemporary History.

Aleš Gabrič (University of Ljubljana)

The Shaping of Slovenian Science Policy after the Second World War

Science policy in Yugoslavia (and Slovenia) after 1945 was marked by two important political changes: the communist takeover and the federal organization of the country. The first can be seen in the subordination of scientific institutions to the communist ideology, the second in the establishment of competent ministries in the republics, while the federal Yugoslav government had no ministry for the field of science. In this paper I focus more on Slovenia, and when citing data, will emphasize the difference between Slovenia and Yugoslavia.

My paper will highlight two phases of scientific policy-making. The first phase, in the second half of the 1940s, is characterized by the imitation of Soviet models of scientific organization. The new scientific institutes were established at the Academy of Sciences and Arts, rather than at the university. The development of technical and natural sciences was significantly promoted, while social sciences and humanities were neglected. The country fostered relations with Eastern European countries, while the import of scientific literature from the West, which had been interrupted at the beginning of the war, was resumed only several years post-war. The subjugation of scientific institutions to the political wishes of the communist authorities was demonstrated externally, above all, by the appointment of Yugoslav President Josip Broz Tito as an honorary member of all three academies at the time – Serbian, Croatian and Slovenian – in 1947–1948.

In the aftermath of Yugoslavia's conflict with the Soviet Union, the Soviet model of science policy was abandoned. In the mid-1950s, several laws were passed at the federal Yugoslav and republican (Slovenian) levels for the operation of scientific institutions. This was the first, more systematic form of science legislation in Slovenia. The largest scientific institutes separated from the Academy and became independent institutions. The state, as founder, was obliged by law to finance the regular work of the scientific institutes, and it is only from this point that we can trace more precise figures on the financing of scientific work. These show that Slovenia, as the most developed part of Yugoslavia, also invested much more in scientific development than did the rest of the country.

Aleš Gabrič

Aleš Gabrič is a researcher at the Institute of Contemporary History in Ljubljana. He specializes in Slovene cultural history, political history, history of education and history of censorship, especially during the communist regime. From 2008 to 2020 he was president of the National Committee for History at the general Matura Examination, and since 2018 he has been president of Slovenska matica (Slovene Society), the oldest cultural and scientific society in Slovenia.

Nils Hansson | Thorsten Halling (University of Düsseldorf)

Bridging the Baltic Sea: Insights into Scientific Networks and Knowledge Transfer in the Baltic Sea Region during the Cold War via Travel Reports and Oral History

This talk presents results from an ongoing project within the “Bridging the Baltic” network (funded by the German Research Foundation): a group of historians in northern Europe with a prime interest in the transfer of knowledge during the Cold War. Drawing on oral history as well as travel reports gathered in archives in northern Europe, our initiative starts from the idea of tracing keylines of development in medicine at selected universities in the Baltic Sea region, from the perspective of post-docs and professors.

Key questions include: what role the scientific exchange in the Baltic Sea region actually played in research practice and in everyday clinical practice; to what extent European collaboration across the Iron Curtain changed over time; and which factors (both barriers and drivers) influenced scientific exchange.

We will present the first outcomes from recent video-recorded interviews with professors in Sweden, Finland, Latvia, Estonia, Lithuania and Germany, as well as an analysis of travel reports. This analysis reveals a mosaic of scientific connections between East and West: debates about maintaining the international character of science, which aimed to locate science beyond dogmas and politics in a positivist way but, at the same time, was not free of bloc interests. Each side claimed itself as the ideal and also used the Baltic Sea – enacted as “*Meer des Friedens*” by the GDR – as a stage for emphasizing their own strengths and disavowing the other side.

Nils Hansson

Nils Hansson (PhD) works at the Department of History, Philosophy and Ethics of Medicine, Heinrich Heine University Düsseldorf, Germany. His main research interests include the enactment of excellence in science and the history of medicine in the Baltic Sea region. He recently edited two special issues: Hansson N, Schlich T. (eds. of special issue) “Beyond the Nobel Prize: scientific recognition and awards in North America since 1900”. *Notes & Records: The Royal Society Journal of the History of Science* (2023); and Hansson N. (ed.) “Medizin im Ostseeraum: Deutsch-skandinavischer Wissenstransfer im Kalten Krieg”. *Medizinhistorisches Journal* 2022; 57(2).

Thorsten Halling

Thorsten Halling is a research fellow at the Department for the History, Theory and Ethics of Medicine at Heinrich Heine University Düsseldorf. His research interests include the culture of remembrance in the history of science, historical network analysis, Nobel Prize history, and contacts in medicine and the sciences during the Cold War.

Claude Debru (Académie des Sciences)

Some Remarks on the Scientific Relationships between France and the Eastern Bloc Countries, 1945–1966

This paper is based on testimonies by French scientists who were in contact with colleagues from USSR and other Eastern bloc countries during the early days of the Cold War. In spite of the fact, that after the end of World War II, French government was mainly busy with economical and physical reconstruction, and in spite of chronic governmental instability, many French scientists, in fields ranging from mathematics to biology and medicine, were engaged in contact with and visits to the USSR. When de Gaulle returned to power in 1958, these contacts were formalized as intergovernmental agreements and creation of cooperation structures.

Claude Debru

Claude Debru, a historian and philosopher of the life sciences and medicine, is emeritus professor of philosophy of science at the Ecole normale supérieure, Paris. He is a member of the French Academy of Sciences, the German National Academy of Sciences Leopoldina, and the French Academy of Agriculture, and is the former President of the European Academy of Sciences. He has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Sandra Klos (Austrian Academy of Sciences)

The Exchange of Scientists in Cold War Europe as a Means of Diplomacy across the Iron Curtain, 1965–1991: The Austrian Scientific Exchange Program in Context

The exchange of scientists was a key element in scientific relationships across the Iron Curtain. Exchanges were an extraordinary and unique opportunity for research visits to the ideologically opposite camp. These exchanges were organized during the Cold War between several countries on a reciprocal basis (including between the United States and the GDR). In comparison with other international science exchange programs, the Austrian program played a particularly important role, as Austria was widely recognized as a neutral ground between East and West.

In 1965, the first bilateral exchange programs were established with the socialist academies of the East. Two years later, these academies joined the European Science Exchange Program of the Royal Society and exchanged the first scientists with Poland. Further programs were launched with Romania (1969), Hungary (1972), Bulgaria (1977), the ČSSR (1978), the GDR (1979), Yugoslavia (1981), and Albania (1986). Until 1991, more than 6,500 exchanges took place, most of them with Poland and Hungary.

Our contextualized analysis of the Austrian exchange program shows that Austria played a key role in facilitating political diplomacy through scientific cooperation. Exchanges of scientists were a tool for more concrete international cooperation and led to the meeting of academy presidents from East and West in Vienna in 1985 and 1988.

Sandra Klos

Sandra Klos is a junior researcher at the Institute of Culture Studies at the Austrian Academy of Sciences in Vienna. As a historian, she specializes in late 19th and early 20th-century European history, with special attention to the history of science and aspects of gender. In her PhD dissertation, she is examining the CVs of members of the Austrian Academy of Sciences with regard to common writing practices and self-fashioning strategies.

Chairs

Mitchell G. Ash

Mitchell G. Ash is Professor Emeritus of Modern History at the University of Vienna, and a full member of the Berlin-Brandenburg Academy of Sciences and Humanities as well as the European Academy of Sciences and Arts. He is author or editor of 20 books and nearly 200 articles and book chapters on the relations of the sciences and humanities with culture, society and politics in the 19th and 20th centuries, most recently the edited volume *Science in the Metropolis: Vienna in Transnational Context, 1848–1918* (New York 2021). His current research is focused on the historical interactions of the sciences and humanities with politics in German-speaking Europe in the 20th century; a book in this field, *The Max Planck Society in the Process of German Unification (1989–2002)*, will be published in fall 2023.

Claude Debru

Claude Debru, a historian and philosopher of the life sciences and medicine, is emeritus professor of philosophy of science at the Ecole normale supérieure, Paris. He is a member of the French Academy of Sciences, the German National Academy of Sciences Leopoldina, and the French Academy of Agriculture, and is the former President of the European Academy of Sciences. He has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Heiner Fangerau

Heiner Fangerau is director of the Department for the History, Philosophy and Ethics of Medicine at Heinrich Heine University Düsseldorf. His major research topics include the role of networks in the development of the sciences and medicine, cultures of remembrance, the history of medical diagnostics and the history of psychiatry. He was elected member of Leopoldina in 2017 and has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Martin Franc

Martin Franc is head of the Department of History of the Academy of Sciences at the Masaryk Institute and Archives of the Czech Academy of Sciences, and teaches at the Faculty of Humanities at Charles University in Prague. He works on the history of nutrition and food in the 18th to 20th centuries, the history of lifestyle after 1945, the social history of science in the 19th and 20th centuries, and the history of the Czechoslovak Academy of Sciences. He has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Rainer Godel

Rainer Godel has been director of the Centre for Science Studies at the German National Academy of Sciences Leopoldina since 2013. He is an extraordinary professor (*außerplanmäßiger Professor*) of German literary studies at Martin Luther University Halle-Wittenberg. He specializes in the history of science and the history of knowledge from the 17th to the 21st centuries and works on (popular) philosophy, the science of man, the literature of the European Enlightenment, academic and literary controversies in the early modern age, and other related topics. He has been academic coordinator of the Steering Committee of the European Academies Research Initiative since 2018.

Karl Grandin

Karl Grandin is director of the Center for History of Science at the Royal Swedish Academy of Sciences in Stockholm. His international collaborations have mostly dealt with scientific

heritage and digital projects. He chairs the History of Physics Group and the Historic Sites committee of the European Physical Society, and is editor of the Nobel Foundation yearbook. He has been a member of the European Academies Research Initiative since 2018.

Dieter Hoffmann

Dieter Hoffmann is Emeritus Scholar at the Max Planck Institute for the History of Science (MPIWG) in Berlin. His research is focused on the history of science and physics in the 19th and 20th centuries, in particular biographies and institutional histories. Another focus is science in totalitarian regimes, especially during the Third Reich and in East Germany (GDR). He was elected member of the International Academy of the History of Science in 2001 and the National Academy of Sciences Leopoldina in 2010, and has been a member of the Steering Committee of the European Academies Research initiative since 2018.

Giovanni Paoloni

Giovanni Paoloni is a full professor at the Sapienza University of Rome, teaching Archival Theory and History and Policies of Scientific Research. His interests are focused on the history of Italian academies, the interaction of archival and library disciplines with the sciences, and the survey of Italian scientific heritage. Elected a member of the Accademia delle Scienze dell'Istituto di Bologna in 2013, he was appointed to the Committee for the History of the Accademia dei Lincei, and has been a member of the Steering Committee of European Academies Research Initiative since 2018.

Michal Šimůnek

Michal V. Šimůnek is a researcher at the Czech Academy of Sciences in Vienna and also cooperates closely with the National Technical Museum in Prague on a number of projects. He specializes in the history and philosophy of science and science policy in the Czech Lands and Czechoslovakia in the 19th and 20th centuries. Currently he is a member of the Lancet Commission on Medicine and the Holocaust and of the board of the Czech Society for the History of Science and Technology.

Piotr Szlanta

Piotr Szlanta is director of the Scientific Center of the Polish Academy of Sciences in Vienna and teaches modern history at the University of Warsaw. He specializes in 19th-century international relations, colonialism, German-Polish relations in the 19th and 20th centuries, the First World War, and Eastern European modern history.