In addition to the Whistleblower Award, this year for the first time the Federation of German Scientists [Vereinigung Deutscher Wissenschaftler – "VDW"] and the German Section of the International Association of Lawyers Against Nuclear Arms ("IALANA") are also presenting the

Posthumous Whistleblower Award

to the physicist who formerly worked at the Karlsruhe Nuclear Research Centre (KfK)

Dr. Léon Gruenbaum (1934-2004)

1. The award winner was born in 1934 while his Jewish parents were in Forbach (Lorraine/Lothringen), having fled from the Nazis in Germany. In the unoccupied part of France, helped by friends from the French Resistance, the family managed to escape deportation to one of the NS extermination camps. After the liberation, Léon Gruenbaum studied physics in France and at the Technical University in Munich. One of his professors was Werner Heisenberg, at whose institute he successfully completed his doctorate in 1964. After conducting research in the UK and in Germany at the TU Darmstadt, he gained a 3-year fixed-term contract as a physicist in the "Society for Nuclear Research (GfK)" in Karlsruhe in 1970 (later: Karlsruhe Nuclear Research Centre KfK; then from 1990 Research Centre Karlsruhe FZK; after the merger with the university in 2009, Karlsruhe Institute for Technology KIT). It was already made clear to him that an extension for a further 2 years and a subsequent permanent contract were a distinct possibility.

a) During his work at the KfK in Karlsruhe there were some controversies, including those surrounding the long-serving Administrative Managing Director Dr. jur. Rudolf Greifeld (1911-1984). An NSDAP member since 1937 and member of the National Socialist Association of German Legal Professionals NSRB since 1936, Dr. Greifeld had held this post at the GfK/KfK since 1956. Prior to this position, he had been employed in the banking sector at Württembergischen Sparkassen- und Giroverband since 1945 and then at the Württemberg Economic Ministry in Stuttgart. At the KfK, the Works Council accused him and the long-term Director of the KfK Legal Department, Dr. Ziegler, whom he had supported, of expressing anti-semitic and NS-sympathetic views on multiple occasions within the KfK. Among other things, he was purported to have boasted to employees about organising the 1940 visit of "The Führer" to Paris, to have stressed how important Hitler was to him, and to have claimed that "today the Jews are once again making the same mistakes as in the past"¹. Dr. Gruenbaum supported these protests and addressed Dr. Greifeld directly with regards to them, but he denied the claims. Later it became known that as a student Dr. Greifeld had already been active in the anti-semitic milieu and even held posts in an aggressively antisemitic student association. Following the controversies that took place in 1972-3, Dr. Gruenbaum's fixed-term contract with the KfK was not extended in 1973, despite an intervention from the Federal Research Ministry. As public criticism of Dr. Greifeld's personal suitability for his post became louder, he took early retirement in 1974. However, he retained a contractual consultancy with the KfK.

b) Even before his contract at the KfK in Karlsruhe was terminated, Dr. Gruenbaum had discovered information about misanthropic acts committed by Dr. Greifeld in the German occupation of France during WWII. Working closely with the Paris-based investigators of Nazi crimes, Beate and Serge Klarsfeld, he managed to uncover documents on the role of Dr. Greifeld in the NS regime and to make these public. One of the documents he found in the archives was written by Dr. Greifeld on 2.1.1941² to his colleagues at the police

¹ sources: KfK-Mitarbeiterbrief (staff letter) from 15.01.1973 to the Parl. State Secretary in the Federal Ministry of Research Dr. Volker Hauff (SPD), in: http://www.forum-ludwig-marum.de/site/assets/files/1012/reader.pdf p. 23-25; see also i.a. Kiefer/Schuffenecker in: Dernières Nouvelles d'Alsace v. 24.10.1975

² accessible as facsimile at: http://www.forum-ludwig-marum.de/site/assets/files/1012/reader.pdf p. 10

department of the German military administration in Paris to draw their attention "for reasons of competence" to a report he had made, including the remarks that "recently" the "Jews in Paris have been more active again". For example, on New Year's Eve there were "very many Jews" attending the cabaret "Le beuf sur le toit" in the hotel "George V" - "as well as members of the Wehrmacht". On the same night, at the cabaret "Trois Valses" the crowd had booed down a German song being played by the band. Jews were also present at that incident, he reported. And there were "very many Jews" attending the "Carrers" cabaret. So, he, Dr. Greifeld, "calls for a re-examination of the granting of late licenses for establishments frequented by the Wehrmacht members and for any late licenses to be made subject to the condition that the owner affixes a notice on the door forbidding entry to Jews". After a handwriting expert at the Court of Appeal in Paris had confirmed the authenticity of the signature of Dr. Greifeld on the old document by comparing it to more recent examples, Dr. Gruenbaum and the Klarsfelds called a press conference in Strasbourg in October 1975 to call for the resignation of Dr. Greifeld from his post as the German delegate in the steering committee of the English-French-German Institut Laue-Langevin (ILL) nuclear research facility in Grenoble. Since Dr. Greifeld denied the publicly made accusations against him, a "Committee on the Greifeld Affair" was formed in France. It collected signatures from more than 400 French and international academics calling on the German Research Ministry to demand that Dr. Greifeld resigns. Research Director G. Amsel from the University of Paris VII turned to the German Federal Research Minister at the time, Hans Matthöfer (SPD), and demanded the cessation of Dr. Greifeld's delegation to Grenoble, in the interest of Franco-German relations³. Shortly afterwards, Dr. Greifeld stepped down from his appointment as a member of the ILL steering committee in Grenoble⁴. However, he continued to deny the activities he was being accused of during the NS era. In the meantime, specialist historians have gathered further incriminating material proving Dr. Greifeld's involvement in Hitler's visit to Paris, which took place during his period working in German-occupied France⁵ and additionally his active participation⁶ in discrimination against Jews.⁷ His job had also involved dealing with the dismissal of Prof. Paul Langevin⁸, the former Director of the "École de Physique et Chimie industrielle" in Paris. (The Institut Laue-Langevin (ILL) in Grenoble, on whose steering committee Dr. Greifeld served until forced to retire in 1976, was named after him.) In Paris (and in Karlsruhe for decades after the war) he also had close contact to Dr. Waldemar Ernst, who (in France and later in Poland) was actively involved in the deportation

³ on this, see, i.a., FAZ, 26.11.1975 "Ärgernis am ILL in Grenoble – 350 französische Wissenschaftler fordern die Abberufung von R. Greifeld"

⁴ see FAZ, 8.12.1975; see also the unpublished study by Dr. Gruenbaum (in French): "Genesis of the Plutonium Society – Political Conspiracies and Deals", p. 276-287; Beate et Serge Klarsfeld, Mémoires. Paris, 2015, p. 404.

⁵ on this, see i.a. the entries in the service diary of Edouard Bonnefoy, 1940/41, Director of the Cabinet of the Seine Department Prefecture, who was in contact with Dr. Greifeld as part of his duties as the representative of the German Occupation Administration. Bonnefoy was actually also illegally active in the Resistance. By hand he carefully recorded the relevant quotes from Greifeld. See i.a. the entries from 18.7.1940: "On the occasion of the honour parade for the Führer in Paris, several hotels will be cleared out. We require the city of Paris to compensate these hotels for this disruption since they will have to remain empty for several days." Source: http://www.stattweb.de/files/civil/Doku20140629.pdf

⁶ see the entries in Bonnefoy service diary from 30.9.1940: "Monsieur Greifeld (M.G.): During the establishment of a new order in Europe there are three groups of opponents who need to be brushed out of the way, perhaps not tomorrow but definitely at some time: the Jews, the Freemasons and the Plutocrats – those who are willing to wage war in order to make money", as well as 5.5.1941: "Dr. Gr. is astonished that the French government is not undertaking keen measures against the Jews; he declares that the Jewish insolence has no end and that it is desirable to establish a good order, against this Jewish movement that is responsible for the war and continues to drive innocent peoples into war."

⁷ see also the study (dissertation) completed at the University of Lyon by Elodie Prost: Edouard Bonnefoy – Un Haut Fonctionnaire sous L'Occupation (juin 1940 – mai 1945). Le devoir de désobéissance. Lyon, 1999, incl.: "Dr. Greifeld, Representative of the German Military Command in France, was at the Director of the Cabinet of the Seine Department Prefecture E. Bonnefoy to communicate the German demands."

⁸ see the entries in the service diary of Edouard Bonnefoy on 1.11 and 12.11.1940

of Jews to Ausschwitz and elsewhere ⁹ and who was Director of the Schwäbische Hüttenwerke smelting works in Aalen after 1945.

c) After leaving KfK in Karlsruhe, Dr. Gruenbaum relocated to Paris. From then on he pursued his work on a comprehensive historical and political study of the "Genesis of the Plutonium Society - Political Conspiracies and Deals" which he intended to submit as a dissertation to the Sorbonne. The manuscript in French is still extant and is currently being prepared for publication. Many times before he died, he made the results of his study available to civil society initiatives and groups such as one-world and anti-apartheid movements¹⁰, so they would be publicly discussed and form the basis of counter-actions. In the study, Dr. Gruenbaum uncovered lines of connection which suggest coherences between 'post-war planning' by the leading functionaries in the NS regime and the actual post-war developments in Western Germany¹¹. This mainly concerned the transfer of large sums of money, technological expertise and, in the case of nuclear research (the "Uranverein" -Uranium Association), the relocation of active, highly qualified specialist personnel from the German "Reich" to "neutral foreign countries" such as Argentina and Brazil. Dr. Gruenbaum made reference to meetings such as one between delegates from the NS Armaments Ministry, led by Albert Speer, and the NS Economics Ministry as well as representatives of armaments companies from the Rhine/Ruhr regions and top-level SS officers. Chaired by Wehrwirtschaftsführer Dr. Friedrich Scheid, this took place on 10 August 1944 in the hotel "Rotes Haus" in Strasbourg - in the period after the Allied Normandy landings in June and when the fall of Paris could be predicted, as well as the defeat of the NS regime itself. Dr. Gruenbaum found out about this from a document, which apparently has not yet made an impact on German history-writing, but which was referenced in the minutes of a meeting of the Subcommittee on War Mobilization at the US Senate on 25 June 1945, led by Senator Harley M. Kilgore¹²; it was officially declassified by the US authorities in 2000. This research has uncovered basic designs for "Nazi post-war planning" but little research has been conducted on the post-1945 implementation of that planning. It is nonetheless known that after the end of the war, a large number of severely 'tainted' high-level functionaries of the NS regime managed to escape to South America via routes known as the "ratlines", with help from the Vatican and Red Cross. Additionally, many companies who had worked closely with the NS regime managed to transfer large sums of money and technological expertise into "neutral foreign countries", from where it could be reintroduced into the German economy some years later¹³. Today, studies have proven that the International Committee of the Red Cross ICRC in Geneva alone issued the necessary travel documents (titres de voyage) to c.

⁹ From 1940 bis 1942 Waldemar Ernst was Director of the Police Department of the Military Command in France and responsible for numerous police measures against the Jews and the arrest of the first thousands of French Jews in 1941; see the documents in: Serge Klarsfeld, Die Endlösung der Judenfrage in Frankreich; einsehbar unter: http://www.forum-ludwig-marum.de/site/assets/files/1012/reader.pdf, p. 11 - 13

¹⁰ see for example the information provided to the jury by the committed anti-apartheid campaigner and doctor from Cologne, Dr. Wolff Geisler.

¹¹ Gruenbaum, op. cit., Vol 2, p. 215 ff.

¹² see US Military Intelligence Report EW-Pa 128, 7 November 1944 (accessible online at: www.cuttingthroughthematrixcl/articles/Intelligence_Report:EW-Pa_28.html - accessed on 15.6.2015), published in: Hearings before a Subcommittee of the Committee of Military Affairs. United States Senate. Seventy-Nineth Congress. First Session. Pursuant to Senate Resolution 107 (78th Congress) and Senate Resolution 146 (79th Congress), Part. 2, June 25, 1945, p. 30-32; its contents are also reproduced in: Henry Morgenthau Jr., Germany Is Our Problem. New York, 1945, 10-11; a German translation can be found in: Förster/Groehler, Der zweite Weltkrieg. Dokumente, Berlin (Ost), 1972, p. 283-286; a facsimilie is reprinted in: Gaby Weber, Daimler-Benz und die Argentinien-Connection. Von Rattenlinien und Nazigeldern, Berlin, 2004, p. 120 ff; a consideration of the document which critically examines the sources can be found in Dietrich Eichholtz, Das Reichsministerium für Rüstung und Kriegsproduktion und die Straßburger Tagung vom 10. August 1944, in: Bulletin des Arbeitskreises "Zweiter Weltkrieg", Nr. 3/4, 1975, p. 5-21; see also Christiane Uhlig et al., Tarnung, Transfer, Transit. Die Schweiz als Drehscheibe verdeckter deutscher Operationen (1938-1952). publ. Unabhängigen Expertenkommission Schweiz – Zweiter Weltkrieg, Zürich, 2001, p. 109-111.

¹³ on this, see Rena Giefer/Thomas Giefer, Die Rattenlinie. Fluchtwege der Nazis. Eine Dokumentation. 3rd edition 1995, p. 22 ff.; Christiane Uhlig et al., Tarnung, Transfer, Transit., op. cit., p. 112 ff. with further references; Gaby Weber, Daimler Benz und die Argentinien-Connection, op. cit., p. 20 ff.

25,000 NS-regime participants by mid-1947 and c. 70,000 by the end of 1948¹⁴; these included known NS war criminals such as Klaus Barbie, Josef Mengele, Erich Priebke and Adolf Eichmann¹⁵. The extent of the capital and technology transfer from the doomed NS regime to neutral countries (particularly Sweden, Switzerland, Argentina, Brazil and other South American countries) is still insufficiently researched; US estimates, however, speak of billions of dollars. In his study, Dr. Gruenbaum revealed how in Argentinean scientific institutes in particular, German nuclear scientists had been employed after 1945 who were previously involved in the "Uranprojekt" of the NS regime.

d) Furthermore, Dr. Gruenbaum carefully found evidence to show how a large number of scientists and administrators with an NS record were able to secure high-ranking positions within the field of German nuclear research once it was permitted again in 1954/55. He then made this information available to civil society initiatives. In the KFZ Karlsruhe after 1956, this concerned the former War Administration Counsellor (*Kriegsverwaltungsrat*) Dr. Rudolf Greifeld, employed as the Administrative Managing Director, and the first Technical Director of the GfK, Dr. Gerhard Ritter, who had worked at IG Farben on the development and production of poison gas pre-1945. Another name with a Nazi past was the chemist Dr. Walther Schnurr. In the NS regime he was a leading explosives expert at Dynamit AG. After 1945 he relocated to Argentina. He was employed by the Argentinean President Peron to work on the first attempts to develop the country's nuclear weapons production. Then in 1956, Federal Minister Franz-Josef Strauß (CSU) called him back to Germany as Department Director at the Ministry for Nuclear Affairs. In 1957, he was then appointed as Technical-Scientific Managing Director of the GfK/KfK.

e) By researching and making available the results of his study, Dr. Gruenbaum also helped to uncover the role of the Nuclear Research Centre (which in 1956 had not been established in Munich as expected by Prof. Werner Heisenberg but, due to recommendations from the highest ranks in the German armed forces¹⁶, in Karlsruhe) in the development of nuclear technology which could lead to proliferation. The close cooperation between the KfK and Argentina¹⁷ led to the construction of the Atucha 1 heavy water reactor in Argentina in 1968, based on a prototype developed and built in Karlsruhe. Prof. Joachim Radkau showed¹⁸ that Dr. Schnurr was involved as an important go-between. A reprocessing plant developed at the KfK was also delivered to Argentina. Dr. Gruenbaum drew attention to the fact that the Atucha 1 reactor produced some 150kg "military-grade" plutonium each year. Work designing this type of reactor, which allowed for plutonium removal without down-time, had already been carried out during the NS regime. The consequences are now known: in 1978, the Argentinean military government, which had for years refused to sign the non-proliferation treaty, started a secret nuclear weapons programme, which was only abandoned after the demise of the junta in 1983.

f) Dr. Gruenbaum also worked closely with civil society initiatives to disclose other dubious projects¹⁹. These included the Qattara Project in Egypt: German companies were planning to employ German expertise there to develop nuclear explosive devices, supposedly to blast a canal from the Mediterranean sea to the Qattara Depression (134m below sea level). The idea was that water would flow for 30 years and drive a hydroelectric plant. This would demonstrate the 'peaceful use' of atomic power. However, the project was never realised. He also pointed out the dubious satellite project of the Otrag company from Munich, which was receiving German taxpayers' money to develop the idea of positioning a ring of stationary

¹⁴ further evidence in: Christiane Uhlig et al., Tarnung, Transfer, Transit. op. cit., p. 190 f.

¹⁵ ibid., p. 196

¹⁶ see i.a. the letter written by Generalleutnant a.D. Hans Speidel from 23.4.1955, reproduced in: http://www.forum-ludwig-marum.de/site/assets/files/1012/reader.pdf, p. 29

¹⁷ see Léon Gruenbaum (in French): "Genesis of the Plutonium Society", p. 325-350; Lecture by Dr. Wolff Geisler in: Forum Ludwig Marum, Symposium Gruenbaum. Karlsruhe 2014, p. 18-21

¹⁹ on this, see Wolff Geisler, ibid., p. 18 ff.

satellites above the equator. More than 200 rocket launches would be needed and Otrag acquired a 225,000 sq. km. site from Zaire near Kolwezi in the uranium-rich province of Shaba/Katanga to test rockets and drones. It is not known if anything came of this. Further, Dr. Gruenbaum cast his critical glance at the Inga-Shaba project: German companies were preparing the construction of a power station at the estuary of the River Congo and the transmission of its electricity over 120km to Lowezi-Shabe. The stated aim was to enrich uranium using the electricity. In his study, Dr. Gruenbaum also pointed out how in 1975 the German government provided support (via the Society for Nuclear Research in Karlsruhe) to Brazil for the enrichment of uranium and promised to help develop 8 nuclear reactors. After the end of the military dictatorship this project was called off. To anti-apartheid initiatives, Dr. Gruenbaum provided information about the transaction that took place in 1977 selling the vortex jet nozzle technology for uranium enrichment, developed under its inventor Prof. Becker in the KfK in Karlsruhe, to the apartheid government in South Africa. Dr. Gruenbaum discovered that this aerodynamic enrichment plant in South Africa had to be considered together with the construction of the Cabora Bassa Dam in the then Portuguese colony of Mozambique. Implemented by the companies Siemens, AEG, BBC, Hochtief and Voith and funded by German development aid, the project was designed to produce electricity for transmission over 1800km to the uranium enrichment plant in South Africa. With this, South Africa's apartheid government was able to develop nuclear weapons - most probably in close cooperation with Israel. It was only just before the end of the apartheid era in 1991 that South Africa (with US help) destroyed the six weapons it had produced. As the Colognebased doctor Dr. Wolff Geisler says, Léon Gruenbaum's information and encouragement were "a decisive factor for the development of public opposition to these unbelievable projects – opposition which was able to partially obstruct or prevent them"²⁰.

3. What were the reasons for the whistleblowing activities of Léon Gruenbaum? He was trying to gain an understanding of the background and reasons for his persecution during the NS era and the discrimination he once again faced in post-war Germany. He wanted to discover the connections and contexts. According to Robert Jungk's summary of the conversations he had with him on this issue, Dr. Gruenbaum did not believe it was a coincidence that Germany's first Minister for Nuclear Affairs, Franz-Josef Strauß, "called in a remarkably large number of characters who had already held senior positions during the Third Reich". In particular, he was interested in the latent military options that were objectively connected with the so-called "peaceful uses" for plutonium production. When, during a visit to Paris in 1973, Robert Jungk asked him whether "this theory is still significant in today's situation", Dr. Gruenbaum responded: "Certainly. I think it really is not a coincidence that these men were so interested in the nuclear industry. They must have already told themselves at a much earlier stage that this industry would be a key one, overshadowing all others in terms of the abundance of power and influence. And there is probably also another motivation: the desire of the Germans to have nuclear weapons one day, too – or at least to have available the industrial capacity in case the situation one day meant they should enable production of the weapons they were forbidden to have."²¹ Dr. Gruenbaum was not alone in this conclusion about the latent military options associated with a nuclear technology infrastructure in Germany - even if those options actually became illegal under international law when the Non-Proliferation Treaty came into effect²². In the meantime, there is good documentation of the fact that the Federal Government signed an agreement on the "joint development and production of nuclear devices" with France and

²⁰ Wolff Geisler, ibid., p. 19 f.

²¹ Robert Jungk, Der Atomstaat, 1979, p. 98 ff.

²² see i.a. Karl Brandstetter, Allianz des Misstrauens. Diss. Gießen. Köln 1989; Matthias Küntzel, Bonn und die Bombe. Deutsche Atomwaffenpolitik von Adenauer bis Brandt. Frankfurt am Main, 1992; Roland Kollert, Die Politik der latenten Proliferation. Militärische Nutzung "friedlicher" Kerntechnik in Westeuropa, Wiesbaden, 1994; ders., Atomtechnik als Instrument westdeutscher Nachkriegs-Außenpolitik. VDW-Materialien 1/2000; Tilman Hanel, Die Bombe als Option – Motive für den Aufbau einer atomtechnischen Infrastruktur der Bundesrepublik bis 1963. Essen, 2015.

Italy in April 1958, although this was strictly rejected by President de Gaulle when he came to power and he regarded it as non-existent²³.

4. Dr. Léon Gruenbaum's whistleblowing and the associated conflicts within the KfK in Karlsruhe had serious consequences for him. He experienced a serious worsening of his nervous disorder, which itself was probably a condition resulting from the meningitis he suffered as a child while fleeing the Nazis with his family. In the latter part of his life he increased his visits to friends in Karlsruhe and in 2004 he died there at the age of 70. His final resting place is the cemetery in Bad Mingolsheim.

He had little understanding when he was told that Dr. Rudolf Greifeld, the long-term Administrative Managing Director of the KfK in Karlsruhe, which was recently incorporated into the Karlsruher Institut für Technologie (KIT), was still an Honorary Senator of the centre. There is still hope that the expert opinion being finalised by the historian Prof. Rusinek from the University of Düsseldorf, who is also the Director of the Archives at the Jülich Research Centre, will lead to the KIT finally taking the decision to divest Dr. Greifeld of this honour because of his involvement in the NS regime.

Frankfurt am Main/Berlin, in August/September 2015

The Whistleblower Award Jury:

Gerhard Baisch (lawyer, Bremen) - Dr. Dieter Deiseroth, Federal Judge ret. (Leipzig/Düsseldorf) - Prof. Dr. Hartmut Grassl (Hamburg) - Dr. Angelika Hilbeck (Zürich) – Christine Vollmer (lawyer, Bremen)

²³ on this, see i.a. http://www.spiegel.de/einestages/deutsche-aufruestung-a-947286.html; Franz-Josef Strauss, Erinnerungen, 1989, p. 313ff; Kollert, Atomtechnik..., 2000, p. 12 ff; Gregor Schöllgen/Stephan Geier, Schwellenmacht Deutschland, in: FAZ, 31.5.2012, p. 7