

## **Bibliography Physics and Human Rights**

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*August 18, 2017*

*Physicists have been actively involved in the defense of Human Rights of colleague physicists, and scientists in general, around the world for a long time. What follows is a list of talks, articles and informed remembrances on Physics and Human Rights by physicist-activists that are available online. The selection is not exhaustive, on the contrary it just reflects our personal knowledge of recent publications; nevertheless, they are in our view representative of the indefatigable work of a large number of scientists affirming Human Rights and in defense of persecuted, in prison or at risk colleagues throughout the world.*

- “*Ideas and Opinions*”  
Albert Einstein  
Crown Publishers, 1954, 1982  
The most definitive collection of Albert Einstein's writings, gathered under the supervision of Einstein himself. The selections range from his earliest days as a theoretical physicist to his death in 1955; from such subjects as relativity, nuclear war or peace, and religion and science, to human rights, economics, and government.
- “Physics and Human Rights: Reflections on the past and the present”  
Joel L. Lebowitz  
*Physikalische Blatter*, Vol 56, issue 7-8, pages 51-54, July/August 2000  
<http://onlinelibrary.wiley.com/doi/10.1002/phbl.20000560712/pdf>  
Based loosely on the Max von Laue lecture given at the German Physical Society's annual meeting in Dresden, 03/2000. This article focus on the moral and social responsibilities of scientists then -Nazi period in Germany- and now. Max von Laue's principled moral response at the time, distinguished him from many of his contemporary scientists.
- "APS Involvement in the Defense of Human Rights"  
Edward Gerjuoy  
*Physics and Society*, vol. 34 No. 3, July 2005, pp. 3-6.  
<http://units.aps.org/units/fps/newsletters/2005/july/articles.html#gerjuoy>  
The primary objective of this paper is to describe the history of the American Physical Society's (APS) past involvement in the defense of human rights and to acquaint the reader with some of the many actions taken by the Committee on International Freedom of Scientists (CIFS) in its attempts to alleviate the human rights violation of scientists worldwide.
- “Einstein, Social Responsibility of Physicists and Human Rights in China”  
Fang Li-Zhi  
*Physics and Society*, vol. 34 No. 3, July 2005, pp, 7-9  
<http://units.aps.org/units/fps/newsletters/2005/july/articles.html#fang>  
Einstein gained Chinese admiration not only because of his scientific achievements, but also because of his constant concern about the cases of injustice, suppression, and human rights abuses in China. The strong sense of social responsibility shown by Einstein is an illustrious role model for Chinese intellectuals, especially for physicists, who advocate the universal principle of human rights.

- “The Conscience of Science: Human Rights and Human Welfare”  
 Irving Lerch  
 Andrew M. Sessler: The Symposium, Lawrence Berkeley National Laboratory, March 15, 2003  
<http://update.aps.org/programs/international/rights/upload/Lerch-Conscience-of-Science-2003.pdf>  
 Events timeline: history, human rights. Issues in Science and human rights. APS programs: letter campaigns. The role of Science in collecting and evaluating evidence of human rights abuses. Truth and reconciliation commissions. Tracking the truth and culprits with chemistry, molecular biology, physical anthropology, physics and mathematics.
- “Science and Human Rights”  
 Carol Corillon, Editor,  
 National Academy Press, Washington, D.C., 1988  
[http://www.nap.edu/openbook.php?record\\_id=9733](http://www.nap.edu/openbook.php?record_id=9733)  
 The topic of science and human rights encompasses dozens of issues and involves scientists and scientist organizations in all corners of the globe. This article examines four of these issues and touches on the specific activities of scientists and scientific organizations in a number of geographic areas. The article is divided into four sections: the scientist as human rights activist, the scientists as human rights victim, the scientist as human rights abuser, and the application of science to human rights work.
- “The AAAS Science and Human Rights Coalition”  
 Juan Gallardo and Michele Irwin  
 Newsletter of the APS Forum on International Physics, May 2013  
<http://www.aps.org/units/fip/newsletters/201302/aaas.cfm>  
 An overview and history of the AAAS Science and Human Rights Coalition and the American Physical Society’s involvement.
- “Human Rights Issues in Physics”  
 Herman Winick  
 Newsletter of the APS Forum on International Physics, February 2012  
<http://www.aps.org/units/fip/newsletters/201202/winick.cfm>  
 This essay starts with this quote from A. Chekov: *There is no national science, just as there is no national multiplication table. Science that is national is not science.* The quote distills the essence of this essay on Human Rights and Physics.
- “From Physics research to human rights advocacy”  
 Toni Feder  
 Physics Today, 26 Nov 2014  
<http://physicstoday.scitation.org/doi/10.1063/PT.5.9031/full/>  
 Interview of Iranian American physicist Hadi Ghaemi. After his PhD from Boston University and several postdoctoral positions, he joined the physics faculty of CUNY. He left academia in late 2000 to work at the Center for Economic and Social Rights, where he did research on human rights developments in Afghanistan and Iraq.
- “American Physical Society (APS), Human Rights website”  
<http://www.aps.org/programs/international/rights/>

APS monitors and advocates for the rights of scientists in the United States and around the globe through the Committee on International Freedom of Scientists (CIFS). You find here a number of resources, a link to the Sakharov Human Rights Prize and APS statements on Scientific Freedom and Human Rights.

- “CIFS Briefs: Highlighting the Connection Between Human Rights and Science for the Physics Community”  
This occasional column provides updates on the human rights activities of the American Physical Society (APS) and its Committee on International Freedom of Scientists (CIFS) in the APS monthly newsletter *APS News*.  
May 2012: <http://www.aps.org/publications/apsnews/201205/cifs.cfm>  
August/September 2012: <http://www.aps.org/publications/apsnews/201205/cifs.cfm>  
January 2013: <http://www.aps.org/publications/apsnews/201301/cifs2013.cfm>  
June 2013: <http://www.aps.org/publications/apsnews/201306/cifsbriefs.cfm>  
October 2013: <http://www.aps.org/publications/apsnews/201310/cifsbriefs.cfm>  
January 2014: <http://www.aps.org/publications/apsnews/201401/cifsbriefs.cfm>  
July 2014: <http://www.aps.org/publications/apsnews/201407/freedom.cfm>  
March 2015: <http://www.aps.org/publications/apsnews/201503/cifs.cfm>  
January 2016: <http://www.aps.org/publications/apsnews/201601/cifs.cfm>  
August/September 2016: <http://www.aps.org/publications/apsnews/201608/cifs.cfm>  
December 2016: <http://www.aps.org/publications/apsnews/201612/cifs.cfm>  
June 2017: <http://www.aps.org/publications/apsnews/201706/cifs.cfm>
- “Andrei Sakharov: Soviet Physics, Nuclear Weapons, and Human Rights”  
American Institute of Physics (AIP) Center for History of Physics  
<http://www.aip.org/history/sakharov/>  
A biography of Andrei Sakharov (1921-1989), a Russian physicist who became, in the words of the Nobel Peace Committee, *a spokesman for the conscience of mankind*. The site has been created by the Center for History of Physics, a division of the American Institute of Physics.
- “Human Rights and International Activities”  
Andrew M. Sessler  
Herman Winick Celebration, Lawrence Berkeley National Laboratory, October 2, 2012  
<http://ssrl.slac.stanford.edu/conferences/workshops/herman-winick-80/documents/andrewsessler.pdf>  
Human Rights and International activities of Herman Winick as told by Andy Sessler on October 2, 2012.
- “Science Policy, Politics and Human Rights”  
Presented by Kurt Gottfried & Sheila Jasanoff  
December 12, 2011  
<http://techtv.mit.edu/videos/16003-science-policy-politics-and-human-rights>  
**Kurt Gottfried** invokes the spirit and philosophy of Andrei Sakharov, Russian physicist and human rights champion. It was Sakharov, Gottfried reminds us, who in recent times forged a powerful connection between science and politics.  
**Sheila Jasanoff** urges scientists to join hands with experts from other disciplines to serve as watchdogs on issues of science and technology. She says that "human rights provides a wonderful umbrella" for such an effort.

- “Eyes in the sky: Remote sensing in the service of human rights”  
Jonathan Drake and Eric Ashcroft  
*Physics Today, Commentary & Reviews*, February 1, 2013  
<http://physicstoday.scitation.org/doi/10.1063/PT.4.0072/full/>  
When oppressive regimes set attack helicopters and tanks on their own citizens, human-rights campaigners are watching from space. If scientific endeavor has a purpose beyond the accumulation of knowledge for its own sake, it must be for the progress and betterment of humanity.
- “Application of satellite imagery to monitoring human rights abuse of vulnerable communities, with minimal risk to relief staff”  
C Lavers, C Bishop, O Hawkins, E Grealey, C Cox, D Thomas and S Trimel  
*Journal of Physics: Conference Series*, Volume 178, Number 1  
<http://iopscience.iop.org/1742-6596/178/1/012039/>  
Space imagery offers remote surveillance of ethnic people groups at risk of human rights abuse. We highlight work in alleged violations in Burma and Sudan, using satellite imagery for verification with Amnesty International.
- “Shattering the Lavender Ceiling: Sexual Minorities in Physics”  
Michael Ramsey-Musolf  
American Physical Society March Meeting, February 28, 2012  
<https://absuploads.aps.org/presentation.cfm?pid=10421>
- “LGBT physicists: The interviews”  
Toni Feder  
*Physics Today (People & History)*, February 27, 2015  
<http://physicstoday.scitation.org/doi/10.1063/PT.5.9034/full/>  
Scientists talk about their experiences as sexual and gender minorities.
- “Guerrilla Tactics for Human Rights”  
Paul Press  
Berkeley Lab News Center, March 19, 2010  
<http://newscenter.lbl.gov/feature-stories/2010/03/19/pripstein-sakharov/>  
At a special session of the American Physical Society in Washington, D.C. on February 15, 2010, Morris (Moishe) Pripstein was honored with the society’s Andrei Sakharov Prize recognizing outstanding leadership in upholding human rights. Pripstein shared the prize with Herman Winick of the SLAC National Accelerator Laboratory and Joseph Birman of the City College and City University of New York.
- “Scientists Call for Release of Imprisoned Iranian Physics Student”  
International Campaign for Human Rights in Iran, February 1, 2013  
[http://www.iranhumanrights.org/2013/02/omid\\_kokabi-2/](http://www.iranhumanrights.org/2013/02/omid_kokabi-2/)  
Two years since the arrest and subsequent imprisonment of Iranian physicist and student Omid Kokabee, scientific societies are redoubling their efforts to secure his release.
- “First Andrei Sakharov Prize for human rights goes to Cornell physicist and former Soviet gulag prisoner Yuri Orlov”

Lauren Gold

Chronicle Online, November 14, 2005

<http://www.news.cornell.edu/stories/Nov05/Orlov.award.ed.lg.html>

Orlov, a senior scientist in Cornell University's F.R. Newman Laboratory for Elementary-Particle Physics, is the first recipient of the Andrei Sakharov Prize, created by the American Physical Society (APS) to honor scientists for exceptional work in promoting human rights.

- “Rutgers math, physics professor, Joel Lebowitz, honored by APS for human rights activism”  
Scienceblog.com, March 2005  
<http://scienceblog.com/community/older/2005/8/200507123.shtml>  
Rutgers University professor Joel L. Lebowitz, an internationally recognized leader in defending the human rights of oppressed scientists received the American Physical Society’s Nicholson Medal for Humanitarian Service.
- “Declaration of Academic Freedom”  
Open letter by the Editor-in-Chief  
*Progress in Physics*, January 2006  
<http://www.ptep-online.com/2006/PP-04-10.PDF>  
The depth and significance of the role of science and technology in human affairs.
- “The International Nature of Physics and International Cooperation”  
Statement by the Council of the American Physical Society, November 12, 1989  
[http://www.aps.org/policy/statements/89\\_2.cfm](http://www.aps.org/policy/statements/89_2.cfm)  
The statement: Science belongs to all humanity and transcends natural boundaries.
- “On Fang Lizhi (1936-2012)”  
Perry Link  
The New York Review of Books, April 13, 2012  
<http://www.nybooks.com/blogs/nyrblog/2012/apr/13/on-fang-lizhi/>  
News of his passing spread quickly on the Chinese Internet. Admirers of his eloquent championing of human rights wrote their accolades. State Security officials noticed, and within hours ordered Internet police to delete all messages that mentioned the words “Fang Lizhi.”
- “Dr. Jack Minker's 2011 Pagels Award Acceptance Speech”  
Jack Minker  
October 25, 2011  
<http://concernedscientists.org/2011/10/dr-jack-minkers-2011-pagels-award-acceptance-speech/>  
Speech to the New York Academy of Sciences Human Rights Committee in the occasion of being co-recipient of the 2011 Heinz R. Pagels Award together with Dr. Binayak Sen of India.
- "Andrei Sakharov: A Man of Our Times,"  
A. M. Sessler and Y. Howell,  
*American Journal of Physics* 52, 397 (1984). **(abstract only)**  
<http://aapt.scitation.org/doi/pdf/10.1119/1.13624>  
The following is based upon a talk given at the American Physical Society Meeting in Baltimore, 18–21 April 1983 entitled, “Sakharov and Society” by Andrew M. Sessler. The occasion was the presentation by the Forum on Physics and Society of the 1982 Leo Szilard to Andrei Sakharov who was, of course, unable to attend.

- “Science, technology and human rights”  
George E. Brown, Jr.  
*Physics Today* 34(3), 27 (1981); doi: 10.1063/1.2914467 (**abstract only**)  
[http://www.physicstoday.org/resource/1/phtoad/v34/i3/p27\\_s1?isAuthorized=no&ver=pdfcov](http://www.physicstoday.org/resource/1/phtoad/v34/i3/p27_s1?isAuthorized=no&ver=pdfcov)  
A Congressman warns that scientists must press vigorously for the protection of all human rights
- "Reflections occasioned by the release of Yuri Orlov,"  
A. M. Sessler,  
Editorial, *Physics Today* 39, 168, Nov (1986).  
<http://physicstoday.scitation.org/doi/abs/10.1063/1.2815231>  
Andy Sessler’s reflection after the release of Y. Orlov and his wife Irina ending an struggle between Orlov and the Soviet state that lasted 30 years
- “Physicists for Human Rights in the Former Soviet Union”  
Yuri Chernyak  
American Physical Society, APS March Meeting, March 21-25, 2005, abstract #H6.00003  
<http://meetings.aps.org/Meeting/MAR05/Event/22409>  
In his 1940 paper 'Freedom and Science' Albert Einstein emphasized that "intellectual independence is a primary necessity for the scientific inquirer" and that "political liberty is also extraordinarily important for his work."  
This talk briefly describes the special position of physicists (often viewed as Einstein's colleagues) in Soviet society, as well as their unique role in the struggle for human rights.
- “Introductory Remarks at Yelena Bonner Lecture, Sakharov Symposium”  
A. M. Sessler,  
UC Berkeley, March (1990); also  
“1st International A.D. Sakharov Conference on Physics, Moscow, USSR,”  
May (1991).
- “Sakharov, Andrei Dmitrievich,”  
A. M. Sessler,  
*Macmillan Encyclopedia of Physics*, V. 4, p. 1391-1392 (1996).

*Suggestions regarding the listings for physics and human rights may be sent to Michele Irwin at [irwin@aps.org](mailto:irwin@aps.org) or to Juan Gallardo at [juanc.gallardo@gmail.com](mailto:juanc.gallardo@gmail.com).*