

Professor Iftikhar Balakishi Abbasov,

Head of Department of Engineering Graphics and Computer Design, Engineering-Technological Academy of Southern Federal University, Taganrog, Russia Prof. Iftikhar B.Abbasov

Curriculum Vitae

He was born in 1966, Lenkoran region, Republic of Azerbaijan. In 1988 he graduated from the Taganrog Radio Engineering Institute with a specialization in electrohydroacoustics and ultrasonics. Within the period from 1989 till 1993 he had been working at the Taganrog Radio Engineering Institute as a senior research assistant, engineer and the Head of the laboratory of Electrohydroacoustics and Ultrasonics Department. Within the period from 1993 till 1996 he had been taking a post-graduate in Taganrog State Radio Engineering University. While taking the post-graduate course, he became a scholarship holder of the Soros Foundation and University Academic Board. After that, in 1996, he was employed as a teaching assistant of the Engineering Graphics Department of the Taganrog Radio Engineering University. In 1997, he defended his thesis for a Doctor's degree in Physical-Mathematical Sciences. Within the period from 1998 till 2013 he had been working as an assistant professor of Engineering Graphics and Computer Design Department and in 2000 received the certificate of the associate professor. In 2012, he defended his thesis for a Doctor's degree in Engineering Science. Since 2013 till date is Head of Department of Engineering Graphics and Computer Design.

The scientific area: mathematical simulation of nonlinear wave phenomena in fluid dynamics and acoustics, computer modeling in industrial design.

He is the author of 20 monographs (chapters of monographs) published by Fizmatlit (Moscow, 2007, 2010); Sciyo (Croatia, 2010); Lambert Academic Publishing (Germany, 2012); DMK Press (Moscow, 2013 - 2021), Publishing group URSS (Moscow, 2015), Nova Science Publishers Inc. (New York, 2015), Research India Publications (India, 2017), Wiley & Scrivener Publishing (USA, 2016 - 2021), 2600 scientific, training and methodology works, 3 State Registration Certificates for computer programs. Basic results of his scientific studies were published in a form of articles in academic, annotated and foreign journals: Doklady (Reports) of Russian Academy of Science, Journal of Acoustical Physic, Proceedings of the Russian Academy of Science, Atmospheric and Ocean Physics, Computational Mathematics and Mathematical Physics, Journal of Technical Physics, Computational Continuum Mechanics, Journal of Sound and Vibration (UK), Waves in Random and Complex Media (UK), Applied Mathematics (USA), International Journal of Pure and Applied Mathematics (EU), Advances in Engineering Software (Elsevier), Critical Reviews in Biomedical Engineering (Begell House). He gives lectures on engineering and computer graphics, 3D computer simulation, product manufacturing technology, perceptual psychology. He is the author of 17 textbooks on application of computer-aided technologies in the field of design. Among them, 9 textbooks were published by DMK Press publishing company (Moscow) and have the signature stamp of the Ministry of Education of the Russian Federation, Scientific and Methodological Council on Engineering Graphics of the Ministry of Education of the Russian Federation, Board of Educational Methodological Association in the field of design, monumental and decorative art and Russian Academy of Natural History. Supervises the scientific work of design students and annually participates in scientific conferences and exhibitions of various levels, supervised the graduation projects of 68 graduates of designers: specialists, bachelors, masters.

He received the professional development courses in the National Research Nuclear University (MEPhI) in Moscow State Art and Industry Academy named after S.G. Stroganov.

He is the member of the Russian Designers Union, Russian Acoustical Society, Indian Mathematical Society. He is married and has a son and a daughter. His bio information is included into book «Russian Scientists» (Russian Academy of Natural History) and international biographical reference books «Marquis Who's Who in the World» (USA), «Who's Who in Russia» (Switzerland).

Total job experience 35 years, teaching and research experience: 30 years. Languages known: Russian, English, German, Azerbaijani, Talysh.

Monographs:

- 1. Abbasov I.B. Scattering nonlinear interacting acoustic waves: sphere, the cylinder and a spheroid. Moscow. Fizmatlit, 2007. 160 p. ISBN: 978-5-9221-0863-8 fml.ru
- 2. Abbasov I.B. Modeling of nonlinear wave phenomena on the surface shallow water. Moscow. Fizmatlit, 2010. 127 p. ISBN: 978-5-9221-1254-3 fml.ru
- Abbasov I.B. Research of the Scattering of Non-Linearly Interacting Plane Acoustic Waves by an Elongated Spheroid. Acoustic Waves. Edited by: Don Dissanayake, Sciyo, Rijeka, Croatia. 2010. P.73-90. doi:10.5772/9786
- 4. Abbasov I.B., Orekhov V.V. Amphibious. Computational modeling. LAP Lambert Academic Publishing, Saarbrucken, Germany, 2012. 69 p. ISBN: 978-3-8473-4957-0 lap-publishing.com
- 5. Abbasov I.B. Computational modeling in industrial design. Moscow. DMK Press, 2013. 92 p. ISBN 978-5-94074-704-8. dmkpress.com
- Abbasov I.B. Three-dimensional numerical simulation of nonlinear runup surface gravity waves. Moscow. Lenand, Editorial URSS Publishers, 2015. 160 p. ISBN: 978-5-9710-2182-7 urss.ru
- Abbasov I.B., Orekhov V.V., Panatov G.S. Computational Modeling of Amphibious Aircraft Be-200 and Be-103. Aircraft: design, technology and safety. Editor Collin Parker. Nova Science Publishers, Inc. New York. 2015. P.111-130. novapublishers.com

- Abbasov I.B. Digital Orchid: Creating Realistic Materials. Chapter 8. Advanced Engineering Materials and Modeling, Editors: Ashutosh Tiwari, N. Arul Murugan, and Rajeev Ahuja. 2016. Wiley & Sons and Scrivener Publishing. P.229-240. ISBN: 978-1-119-24246-8, doi:10.1002/9781119242567.ch8 onlinelibrary.wiley.com
- 9. Abbasov I.B. Hydroacoustic Ocean Exploration: Theories and Experimental Application. Wiley & Sons and Scrivener Publishing. 2016. 192 p. ISBN: 978-1-119-32354-9, doi:10.1002/9781119323723 onlinelibrary.wiley.com
- Abbasov I.B. Study of sum-frequency wave field at scattering of nonlinearly interacting plane acoustic waves by an elongated spheroid. Chapter 10. Environmental Engineering. Current Perspective. Editor-in-Chief: Prof. Soong-Ung Park. Research India Publications. Delhi. 2017. 440p. P.131-145. ISBN:978-93-86138-95-8 ripublication.com
- Abbasov I.B. 3D Modeling of Nonlinear Wave Phenomena on Shallow Water Surfaces. Wiley-Scrivener, 2018. 276 p. ISBN: 978-1-119-48821-7, doi:10.1002/9781119488187 onlinelibrary.wiley.com
- Exploration and Monitoring of the Continental Shelf Underwater Environment. Edited by Iftikhar B. Abbasov. Wiley-Scrivener, 2018. 318 p. ISBN: 9781119488309 doi:10.1002/9781119488309 onlinelibrary.wiley.com
- Abbasov I.B. Monitoring of Aqueous Environment of the Continental Shelf: The Current State. P.1-24, Chapter 1, doi.org/10.1002/9781119488309.ch1 in book Edited by Iftikhar B. Abbasov. Wiley-Scrivener, 2018. 318p. ISBN: 9781119488309
- 14. Abbasov I.B. Computer modeling in industrial design. Publisher: Independently published, 2019. 60p. ISBN-13:9781794555785 <u>amazon.com</u>
- 15. Computer Modeling in the Aerospace Industry. Edited by Iftikhar B. Abbasov, Wiley-Scrivener, 2020, 282 p. ISBN:9781119682264, doi:10.1002/9781119682264 onlinelibrary.wiley.com
- Abbasov I.B. Computer modeling in the aerospace industry / ed. I.B. Abbasov. M.: DMK Press, 2020 .-- 300 p. ISBN 978-5-94074-675-9 https://www.labirint.ru/books/720513/
- Abbasov I.B. Computer Simulation in Aircraft. P.1-24, Chapter 1, doi.org/10.1002/9781119682264.ch1 in book Edited by Iftikhar B. Abbasov. Wiley-Scrivener, Wiley-Scrivener, 2020, 282 p. ISBN: 9781119682264
- Abbasov I.B., Barvenko V.I., Voloshchenko V.Yu., Grivtsov V.V., Doroshenko S.A., Zemlyanaya T.N., Kalashnikova T.G., Koretskaya S.S., Krasnovskaya N. .V., Lee V.G., Orekhov V.V. Design projects: from idea to implementation. Ed. Abbasova I. B. - M .: DMK Press, 2021. -358 p. ISBN 978-5-97060-891-3 https://dmkpress.com/catalog/computer/graphics/978-5-97060-891-3/
- Abbasov I.B. "Recognition and Perception of Images, Fundamentals and Applications". Edited by Iftikhar B. Abbasov, Wiley-Scrivener, 2021, 464 p. ISBN: 9781119750550, DOI: 10.1002/9781119751991 <u>https://onlinelibrary.wiley.com/doi/book/10.1002/9781119751991</u>

20. Abbasov I.B. Perception of images. Modern Trends. P.1-62, Chapter 1, doi.org/10.1002/9781119751991.ch1 in book "Recognition and Perception of Images, Fundamentals and Applications" Edited by Iftikhar B. Abbasov. Wiley-Scrivener, 2021, 464 p. ISBN:9781119750550 <u>https://onlinelibrary.wiley.com/doi/10.1002/9781119751991.ch1</u>

Several Textbooks:

- Abbasov I.B. Visual perception. Textbook. Moscow. DMK Press, 2016. -136 p. ISBN: 978-5-97060-407-6 dmkpress.com
- Abbasov I.B. Fundamentals of 3D modeling in the graphic system 3 ds Max 2018. Study Guide. Textbook. Third edition. Moscow: DMK Press. 2017. 186 p. ISBN: 978-5-97060-516-5 dmkpress.com
- 3. Abbasov I.B. A Fascinating Journey into the World of 3D Graphics with 3ds Max. Amazon Digital Services LLC, 2017. 239 p. ASIN: B076333ZQD [Electronic resource] amazon.com Hard copy: Publisher: Independently published, May 13, 2018, 49p. ISBN-10:1981085408 amazon.com
- Abbasov I.B. Psychology of Visual Perception. Publisher: Independently published, 2019, 107p. ISBN-13:9781793340351 amazon.com
- Abbasov I.B. Industrial Design in Autocad 2018. Study Guide (approved by UMO in the field of design, monumental and decorative arts). M.: DMK Press, 2018. 230 p. (4th edition, revised and enlarged). ISBN: 978-5-97060-645-2 dmkpress.com
- Abbasov I.B. Fundamentals of Graphic Design in Photoshop 2021 (UMO accredited in design, monumental and decorative arts). Moscow: DMK Press. 2021. 226 p. (fourth edition). ISBN: 978-5-97060-940-8 <u>https://dmkpress.com</u>
- 7. Abbasov I.B. Industrial design in AutoCAD. Publisher Amazon.com: Independently published (October 23, 2021). 191 p. ISBN-13:979-8752447914 ASIN:B09K1XCTL4 <u>https://www.amazon.com</u>
- Abbasov I.B. Basics of graphic design in Photoshop 2021. ISBN-13:979-8845622167, ASIN:B0B92H6BBW, Independently published (August 9, 2022), Amazon. 189p. https://www.amazon.com

Several Articles:

- 1. Abbasov I.B., Zagrai N.P. Scattering of interacting plane waves by a sphere//Acoustical Physics. 1994. V.40. №4. P.473-479. springer.com
- 2. Abbasov I.B., Zagrai N.P. Sphere scattering of nonlinear interacting acoustic waves //Fluid Dynamics. V.30. № 2. 1995. P.158-165. doi:10.1007/BF02029824 springer.com
- 3. Abbasov I.B., Zagrai N.P. Experimental investigation of the scattering of the field of a parametric antenna by a hard sphere//Technical Physics. 1996. V.41. №11. P.1172-1176. springer.com

- 4. Abbasov I.B. Zagrai N.P. The investigation of the second field of the summarized frequency originated from scattering of nonlinearly interacting sound waves at a rigid sphere //Journal of Sound and Vibration. 1998. V.216. №1. P.194-197. doi:10.1006/jsvi.1998.1638 sciencedirect.com
- Abbasov I.B. The secondary field of the sum-frequency wave caused by the scattering of interacting acoustic waves by a stiff cylinder // Acoustical Physics. 2000. V.46. №6. P.734-736. doi:10.1134/1.1326730 springer.com
- Abbasov I.B. Study and simulation of nonlinear surface gravity waves under shallow-water conditions //Izvestiya, Atmospheric and oceanic Physics. V.39, №4, 2003, P.506-511. pleiades.online
- Abbasov I.B. Scattering of the parametric-antenna acoustic field by spheroidal objects //Doklady Physics. 2006. V.51. №9. P.490 – 492. doi:10.1134/S1028335806090084 springer.com
- Abbasov I.B. Study of the scattering of nonlinearly interacting plane acoustic waves by an elongated spheroid//Journal of Sound and Vibration. 2008. V.309. №1. P.52-62. doi:10.1016/j.jsv.2007.03.060 sciencedirect.com
- 9. Abbasov I.B. Modelling of nonlinear surface gravity waves in shallow water with regard to dispersion //Doklady Earth Sciences. 2009. V.429. №9. P.1605-1607. doi:10.1134/S1028334X09090414 springer.com
- Abbasov I.B. Modelling of nonlinear surface gravity waves under shallow-water conditions with account of dispersion //Waves in Random and Complex Media. 2011. V.21. №1. P. 13-22. doi.org/10.1080/17455030.2010.500702 tandfonline.com
- Abbasov I.B. Simulation the runup of nonlinear surface gravity waves a steep coastal slope //International Journal of Pure and Applied Mathematics. 2013. V.84. №3. P.299-306. ijpam.eu
- 12. Abbasov I.B., Orekhov V.V. Computational modeling of multipurpose amphibious aircraft Be-200 // Advances in Engineering Software. 2014. V.69, №3, P.12-17, sciencedirect.com
- Abbasov I.B. Three dimensional simulation of the runup of nonlinear surface gravity waves //Computational Mathematics and Mathematical Physics. 2014. V.54, №5, pp. 900–914. springer.com
- Abbasov I.B., Orekhov V.V. Computational modeling of passenger amphibian aircraft Be-200 cabin interior // Advances in Engineering Software. 2014. V.76, P.154-160. sciencedirect.com
- 15. Abbasov I.B. Study of second harmonic wave field at scattering of nonlinearly interacting plane acoustic waves by an elongated spheroid //International Journal of Acoustics and Vibration, V.20, №4, 2015, P.258-264 doi:10.20855/ijav.2015.20.4389. iiav.org

- Abbasov I.B., Orekhov V.V. Computational modeling of the cabin interior of the conceptual model of amphibian aircraft "Lapwing" //Advances in Engineering Software. 2017. V.114, P.227–234 sciencedirect.com
- Abbasov I.B., Zagrai N.P. "The problems of wave scattering by spheroidal bodies" 2017 Radiation and Scattering of Electromagnetic Waves (RSEMW), Divnomorskoe, 2017, P.84-86. doi:10.1109/RSEMW.2017.8103571 ieeexplore.ieee.org
- Abbasov I.B., Orekhov V.V. Conceptual Model and Interior Design "Water Strider" Ekranoplan //International Review of Mechanical Engineering, 2019, V.13, №3, P.162-172. doi.org/10.15866/ireme.v13i3.16244
- 19. Abbasov I.B., Ignatyev V.V., Orekhov V.V. Autonomous mobile robotic system "Sesarma"//IOP Conf. Series: Materials Science and Engineering 560 (2019) 012001, 9p. doi:10.1088/1757-899X/560/1/012001
- Abbasov I.B., Orekhov V.V. Conceptual design of multifunctional hydrofoil vessel "Afalina"//Journal of Physics: Conference Series, V.1399, Engineering and Materials Science. APITECH-2019. 7p. 1399 044020, doi.org/10.1088/1742-6596/1399/4/044020
- Abbasov I.B. Artificial intelligence in medical imaging //Journal of Physics: Conference Series. – IOP Publishing, 2021. – V.2094. №. 3. APITECH-2021. 6p. 032008. <u>https://iopscience.iop.org/article/10.1088/1742-6596/2094/3/032008</u>
- 22. Abbasov I.B. Three-dimensional bioprinting of organs. Modern achievements //Critical Reviews in Biomedical Engineering, 50(3): 2022. P.19–34 https://doi:10.1615/CritRevBiomedEng.2022043734

Awards/Honors:

- "Soros Postgraduate", Grant of Soros Fund, for achievements in scientific research, 1995.
- Scholarship of the Academic Board of Taganrog State Radio Engineering University, for achievements in scientific research, 1996.
- Grant of US Civilian Research and Development (CRDF, REC-004), for winning in competition of scientific research, 2000.
- Diploma III degree of national competition "Computer Engineering 2005", Moscow State Aviation Technological University named after Tsiolkovsky, for textbook Abbasov I.B., Lee V.G., Ilyushchenko N.L. "Three-dimensional modeling in graphical system Mechanical Desktop". Taganrog: TSURE. 2004. 112 p., Moscow, 2005.
- Winner of the national competition "The Best Scientific Book of 2008", for the textbook Abbasov I.B. "Basics of graphic design on the computer in the Photoshop CS3". M.: DMK Press. 2008. 224 p., second edition, National Education Development Foundation, Sochi, 2008.

- Diploma special, V Youth Festival of Information Technology "IT-Arkhangelsk",
 Pomorskyi State University, for guide of student design-project, Arkhangelsk, 2008.
- Winner of the national exposition of textbooks "Golden Fund of National Science 2009", for the textbook Abbasov I.B. "Basics of graphic design on the computer in the Photoshop CS3". M.: DMK Press. 2008. 224 p., second edition, Russian Academy of Natural Sciences, Moscow, 2009.
- Winner "Best Research Book of Teachers SFU", for the monograph Abbasov I.B.
 "Modeling of nonlinear wave phenomena on the surface shallow water". M.: Fizmatlit, 2010. 127 p., Southern Federal University, 2010.
- Winner "Best Textbook of Teachers SFU", for the textbook Abbasov I.B. "Basics of three-dimensional modeling in the graphics system 3 ds Max 2009". M.: DMK Press. 2010. 176 p., second edition, Southern Federal University, 2010.
- Winner of the national exposition of textbooks "Golden Fund of National Science 2011", for the textbook Abbasov I.B. "Basics of three-dimensional modeling in the graphics system 3 ds Max 2009". M.: DMK Press. 2010. 176 p., second edition, Russian Academy of Natural Sciences, Moscow, 2011.
- Grant for the development of the multimedia textbook "Three-dimensional computer modeling", head of grant, Southern Federal University, 2011.
- Grant "Conceptual design of amphibians," head of grant, №213.01-24/2013-162, Southern Federal University, 2013.
- Anniversary medal of III Degree "For Merit of the Southern Federal University", Southern Federal University, 2015.
- Gold medal of South Russian Humanitarian Institute, for the contribution to Design education and training, 2016.
- Foreign Faculty Resource Person under MHRD Scheme: GIAN Program course entitled "Perception and Modeling of Three-Dimensional Scenes" course code [176040K03], Department of Computer Science and IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad(MS)-431004, India. December, 2017. www.bamu.ac.in
- nominee of the competition for the Prize of the Government of the Russian Federation in the field of education for 2020 from SFedU, application 20-08 "Set of tutorials" Computer technologies of design in design "", February 2020
- first degree diploma of the All-Russian competition of innovative methodological developments in the field of higher education according to UGNS 07.00.00
 "Architecture" and UGNS 54.00.00 "Fine and Applied Arts" dedicated to the 100th anniversary of the creation of VKHUTEMAS "VKHUTEMAS - 2020", for the development of the course "Three-dimensional computer modeling ", MGHPA im. S.G. Stroganov, November 2020
- gratitude from the SFedU rector to the mentor, tutor and customer for a significant contribution to the development of student team projects and for the proposed

project 15I in the design and educational intensive of the Southern Federal University "SfeduNet 3.0" according to the model of the NTI University "20.35", May 2021

- diploma for many years of scientific and pedagogical activity in the field of design from the Union of Designers of Russia, April 2021
- awarded the honorary title "Honorary Worker of Education of the Russian Federation", order of the Ministry of Education and Science of Russia No. 394-k/n dated 04.07.2022

List of books and articles, links:

ORCID	http://orcid.org/0000-0003-4805-8714
SCOPUS	http://www.scopus.com/authid/detail.url?authorId=55953053900
RESEARCHERID	http://www.researcherid.com/Workspace.action
AMAZON	https://www.amazon.com/author/ibabbasov
RESEARCHGATE	https://www.researchgate.net/profile/Iftikhar_Abbasov
WHOISWHO	marquiswhoswho.com/Iftikhar_Abbasov

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