

List of scientific and learning and teaching works

Manana Mamulashvili

#	Name of scientific work	Printed	Publishing house or journal	Number of pages	Names of co-authors
1	Cation-exchange treatment of industrial effluents from the Kutaisi Lithopon Plant	Printed	Analytical Control and Environmental Protection Techniques" Scientific Proceedings of the Lenin State Research Institute No. 6(228) 1985	43-45	V.N. Gaprindashvili N.A.Khurtsidze M.A.Mamulashvili S.P.Gogichaeva
2.	Technological scheme of waste gas cleaning Rachinsky GHZ. Abstracts of the IV Resp.	Printed	Scientific and Technical Conference "Chemistry and Scientific and Technical Progress", Kutaisi, 1988		Sh.N. Andguladze D.R. Lomidze. M.A. Mamulashvili
3	Method for cleaning flue gases from sulfur dioxide and solid dispersed particles.	Printed	Author's certificate #1563742. 13.01.1988.15.05. 1990, Bulletin No.18		Sh.N. Andguladze, M. I. Chkonia, L. L. Kashakashvili, M. Mamulashvili G. G. Dzimsheleishvili
4.	The operation of the hydraulic removal system for pyrite calcine at the Cherepovets Chemical Plant.	Printed	Ministry of Higher and Secondary Special Education, State Pedagogical Institute named after VI. Lenin, scientific work, No. 5 (347), Tbilisi, 1989		Sh.N. Andguladze M.I. Chkonia, L.L. Kashakashvi-li M.A. Mamulashvili G.G. Gimsheleishvili
5.	Methods and means of environmental protection analysis. Lab. Practice II part.	Printed	Stu. Publishing House "Technical University" ISBN978-99940-955-2-0 (Part II) Tbilisi. 2007		L. Gverdtsiteli I. Bazghadze, J. Gugeshidze, M. Mamulashvili
6.	Purification of wastewater for ice cream and waffle production	Printed	International Scientific-Technical Conference. Environment Protective and sustainable Development.Work Tbilisi.Stu.2010	71-79	L. Gverdtsiteli J. Gugeshidze E. Mezvrishvili M. Mamulashvili
7.	Nanotechnology method for water disinfection	Printed	II International conference: Modern Technologies and Methods of Inorganic Materials Science. Collection of reports. Tbilisi. 2015	301-302	D. Eristavi, N. Bibiluri Sh. Andguladze M. Gugeshidze E. Matsaberidze M. Mamulashvili
8.	Investigation of chemical stability and mechanical properties of ion-exchange membranes in lead crocoites	Printed	Georgian Engineering News, №4, vol. 80. 2016	116-120	N. Chkhubianishvili, G. Mchedlishvili, L. Kristesashvili, M. Mamulashvil

	containing industrial waste waters				J. Kerkadze
9.	Laboratory practicum of industrial facility monitoring. Teaching aid	Printed	GTU. Protocol №2. Tbilisi, Publ. House "Technical University", ISBN 978-9941-20-721-1 2016	71	D. Eristavi, M. Mamulashvili E. Matsaberidze
10.	Laboratory practicum of natural object monitoring (Teaching aid)	Printed	GTU. Protocol №2. Tbilisi, Publ. House "Technical University" ISBN 978-9941-20-722-8 2016	114	D. Eristavi, M. Mamulashvili E. Matsaberidze
11.	Weighted and Chemicals in Tbilisi sea water Regulation of component quantity by Baromembraneous processes	Printed	Georgian Chemical Journal, 2017 . Vol.17. N1	181-182	M.Mamulashvili
12.	Study of hexavalent chrome And lead concentration in the waste waters during electrodialysis	Printed	"Chemistry - Achievements and Perspectives" International Scientific-Methodological Conference dedicated to the 85th anniversary of Academician Givi Tsintsadze Tbilisi 2018	211-213	N.Ghkubianishvili, M. Mamulashvil G.Mchedlishvili
13.	Eiectrik equipment and eiectromagnetik radiation	Printed	"Chemistry - Achievements and Perspectives" International Scientific-Methodological Conference dedicated to the 85th anniversary of Academician Givi Tsintsadze Tbilisi 2018	213-215	M. Mamulashvili E.Matsaberidze, N.Rachvelishvili
14.	PURIFICATION OF LEAD THROUGH WATER ELECTRODIALYSIS METHOD	Printed	Georgian Chemical Journal, 2018 . Vol.18. N1 ISSN 1512-0686	139-142	N. Chkhubianishvili, M. Mamulashvili G. Mchedlishvili, L. Kristesashvili
15.	RESEARCH OF NANOFILTRASION PROCESSES WITH QUANTITATIVE DEFINITION OF CHEMIKAL ELEMENT CALCIUM (Ca^{2+})	Printed	Georgian Chemical Journal, 2018 . Vol.18. N1 ISSN 1512-0686	116-117	N.Gogesashvili M. Mamulashvili N.Mumladze L.Ebanoidze E.Kakabadze T.Bitkhuzi Z.Javashvili

16.	DETERMINATION OF THE LIMIT CONCENTRATION FOR THE CONCENTRATE COMPARTMENT SOLUTION	Printed	Georgian Engineering News, 2'18 ISSN 1512-0287	73-74	Chkhubianishvili N.G Mamulashvili M.A. Mchedlishvili G.S Kristesashvili L.V Kurtskhalia S.S
17.	ELABORATION OF THE TECHNOLOGICAL PROCESS OF THE METHOD OF ELECTRODIALYSIS FOR LEAD CROCOTITE WASTE WATER TREATMENT	Printed	Georgian Engineering News, 2'18 ISSN 1512-0287	71-72	Chkhubianishvili N.G Mamulashvili M.A. Mchedlishvili G.S Kristesashvili L.V
18.	HARMFUL EFFECT OF HOUSEHOLD CHEMISTRY ON HUMAL	Printed	PROCEEDINGS OF INTERNATIONAL SCIENTIFIC-PRACTIKAL CONFERENCE “SCIENCE AND INNOVATIVE TECHNOLOGIES” VOLUME II KUTAISI-2018	179-183	E.Matsaberidze M.Mamulashvili
19.	PURIFICATION OF LEAD CROCOTITE PRODUKTION WASTE WATERS THROUGH ELECTRODIALYSIS METHOD USING IONEXCHANGE MEMBRANES	Printed	PROCEEDINGS OF INTERNATIONAL SCIENTIFIC-PRACTIKAL CONFERENCE “SCIENCE AND INNOVATIVE TECHNOLOGIES” VOLUME II KUTAISI-2018	172-174	Chkhubianishvili N.G Mchedlishvili G.S Matsaberidze E.L. Kristesashvili L.V
20.	Purification of lead crocoite-containing waters using ion-exchange membranes	Printed	86 th International Student Scientific Conference Collection of theses Tbilisi 2018	123	M.Mamulashvili
21.	STUDY OF THE PROCESS OF ELECTRODIALYSIS PURIFICATION OF THE WASTE WATERS FOR THE LEAD CHROME PRUDUCTION	Printed	GTU Collection of Scientific works ISSN 1512-0996 №1(511) Tbilisi 2019	112-118	N.Chkhubianishvil G. Mchedlishvili M.Mamulashvili

22	Development of technology of lead crocoite production waste waters treatment	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory ABSTRACTS Tbilisi 2019	52-53	Mamulashvili M.A. Chkhubianishvili N.G Mchedlishvili G.S
23.	Creation and processing of polymeric membranes to produce high quality water	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory ABSTRACTS Tbilisi 2019	57-58	G.Bibileishvili M. Kezherashvili N.Gogesashvili M.mamulashvili
24.	Purification of waste waters polluted by lead and chromium ions using nanofiltration method	Printed	Georgian Chemical Journal, ISSN 1512-0686 VOL.19 №1 2019	66-67	G.Bibilashvili, M. Mamulashvili, M. Kezherashvili, Z.Javashvili, E.Kakabadze
25.	Baromembrane processes for processing Grape and tangerine juice	Printed	Georgian Chemical Journal ISSN 1512-0686 VOL.19 №1 2019	91-92	G.Bibilashvili, M. Mamulashvili, M. Kezherashvili, Z.Javashvili, E.Kakabadze
26.	PURIFICATION OF LEAD CROCOITE PRODUCTION WASTE TECHNOLOGY PROCESSING	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory WORKS Tbilisi 2020	104-107	Mamulashvili M.
27.	INFLUENCE DEBARINATION- DEFUORINATION OF BORJOMI MINERAL WATER ON CALCIUM	Printed	Georgian Engineering News № 2 vol .91 2020	145-146	Bibileishvili G.V., Mamulashvili M.A. and Butchuzi T.G.

28.	INFLUENCE DEBARINATION- DEFUORINATION OF BORJOMI MINERAL WATER ON CHLORINE	Printed	Georgian Engineering News № 2 vol.91 2020	147-148	Bibileishvili G.V., Mamulashvili M.A. and Butchuzi T.G
29	Elaboration of the Process of Debarination – Defluorination of Molecular and Ionic Systems by Creation of Nanotechnologies and Nanosystems	electronic	International Journal of Progressive Sciences and Technologies (IJPSAT) ISSN: 2509-0119. © 2020 International Journals of Sciences and High Technologies http://ijpsat.ijsh-journals.org Vol. 23 No. 2 November 2020,	533-540	Giorgi Bibileishvili, Manana Mamulashvili, Zaza Javashvili
30	The chocolate we eat	Printed	87th Open International Conference of GTU Students 2020	138	M. Mamulashvili N.Chkoidze-student
31	PREDICTION AND ITS IMPORTANCE IN NATURE USE	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	81-85	Mchedlishvili G.S. Mamulashvili M.A.
32	Study of organic component of Georgian therapeutic mud-forfotes by infrared spectroscopy	electronic	International Journal of Progressive Sciences and Technologies (IJPSAT) ISSN: 2509-0119. July2021 Vol. 27, №2	Impact Factor:i cv=80, 38 SJIF=6 ,662 IFSIJ7, 625	Liana Ebanoidze, Ekaterine Matsaberidze, Manana Mamulashvili
33	STUDY OF THE INFLUENCE OF VISCOSITY ON THE MORPHOLOGY OF POLYETHERSULFONE (PES) MEMBRANES	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	104-106	Bibileishvili G.V., Kezherashvili M.G., Gogesashvili N.N. Mamulashvili M.A.
34	STUDY OF THE EFFECT OF POLYMER ADDITIVE ON THE STRUCTURE OF MEMBRANES OBTAINED FROM ALIPHATIC AMIDES	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	107-109	Bibileishvili G.V., Gogesashvili N.N., Mamulashvili M.A. Javashvili Z.D.
35.	INVESTIGATION OF MORPOLOGICAL PROPERTIES OF MEMBRANE FILM FOR	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	118-120	Bibileishvili G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A,

	POLYETHERSULFONE UNDER THE INFLUENCE OF ORGANIC ADDITIVES				Ebanoidze L.O.
36	Microbiological study of Black Sea water and use of ultrafiltration method to provide ecologically clean water to the resort area of Georgia.	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	115-117	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Butchuzi T.G.
37	Microbiological study of fresh natural water treated with ultrafiltration membranes	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	113-114	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Kakabadze E.G.
38	Study of the effect of microgel particle size in a polymer composition on the morphology and characteristics of membranes	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	121-122	Bibileishvili G.V., Kezherashvili M.G., Gogesashvili N.N., Mamulashvili M.A., Ebanoidze L.O.
39	The use of polymer membranes in the technological process of wine processing	Printed	International Scientific-Practical Conference "Aspects of Innovative Research in Agrarian Sciences" Tbilisi 20-21 November 2021	194-196	Bibileishvil G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A., Ebanoidze L.O.
40	EFFECT OF HARDNESS SALTS ON THE Z-POTENTIAL AND CONDUCTIVITY OF NATURAL WATER	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,95 2022 DOI: https://doi.org/10.36073	107-108	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G. and Kakabadze E.G.
41	Study of the influence of acids on the phase inversion process of the formation of membranes from polymer compositions	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 DOI: https://doi.org/10.36073	82-83	Bibileishvili G.V., Gogesashvili N.N., Kezherashvili M.G., Mamulashvili M.A.
42	Some issues of drinking and wastewater treatment by baromembrane processes	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 DOI: https://doi.org/10.36073	87-88	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Kakabadze E.G.

43	Study of the chemical composition of apple juice and Saperavi wine material	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 DOI: https://doi.org/10.36073	117-119	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G., Javashvili Z.D.
44	Sterile microfiltration and microbiological analysis of Saferavi wine material	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 DOI: https://doi.org/10.36073	111-112	Bibileishvili G.V., Mamulashvili M.A., Kezherashvili M. G., Bibileishvili I.V.
45	Analysis of the influence of the angle of immersion of a polymer composition into a bath on the phase inversion process.	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 DOI: https://doi.org/10.36073	80-81	Bibileishvili G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A, Ebanoidze L.O.
46	CALCULATION OF INITIAL THERMODYNAMIC PARAMETERS THROUGH THE MODIFIED ADDITIVITY RULE	Printed	Oxidation communications vol. 45, №4 2022 Sofia, BULGARIA Impact Factor 0.541	595-599	E.L.Matsaberidze M.A.Mamulashvili
47	THEORETICAL AND EXPERIMENTAL STUDY OF THE GEOMETRY AND PARAMETERS OF THE HYDRODYNAMIC REGIME OF THE PRESSURE CHAMBER OF A FLAT-PARALLEL TYPE MEMBRANE DEVICE FOR MICROFILTRATION OF WINE AND ULTRAFILTRATION OF WATER	Printed	Georgian Engineering News № 2 vil.98 2023 https://doi.org/10.36073 ISSN /1512-0187	84-88	Bibileishvili G.V., Kezherashvili M.G. Mamulashvili M.A
48	A STUDY OF THE NANOFILTRATION PROCESS IN NATURAL, FRESH WATER DISSOLVED TO SEPARATE 0.2% MgSO ₄ and 15% NaCl	Printed	Georgian Engineering News № 3 2023 https://doi.org/10.36073 ISSN /1512-0187	66-68	Bibileishvili G.V., MamulaShvili M.A., Kakabadze E.G., Kezherashvili M.G. Javashvili Z.D

49	STUDYING THE OPTIMAL MODE PARAMETERS OF THE MICROFILTRATION SEPARATION PROCESS AND THE MECHANISM OF SEDIMENT FORMATION ON THE MEMBRANE SURFACE UNDER HYBRID FLOW CONDITIONS	Printed	Georgian Engineering News № 3 2023 https://doi.org/10.36073 ISSN /1512-0187	69-72	Bibileishvili G.V., Kezherashvili M.G., Kuparadze L.P., Mamulashvili M.A. and Ebanoidze L.O.
50	STUDY OF THE QUALITY OF ELECTRICAL CONDUCTIVITY OF DEIONIZED WATER OBTAINED FROM NATURAL WATER	Printed	Georgian Engineering News № 3 2023 https://doi.org/10.36073 ISSN /1512-0187	64-65	Bibileishvili G.V., Butkhuzi T.G., Mamulashvili M.A. and Javashvili Z.D.
51	BACTERIOLOGICAL RESEARCH OF NATURAL WATER AND WINE MATERIALS USING MICRO- AND ULTRAFILTRATION PROCESSES	Printed	Georgian Engineering News № 3 2023 https://doi.org/10.36073 ISSN /1512-0187	71-72	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G. Kakabadze E.G
52	DETERMINATION OF TURBIDITY INDEX OF WINE AND FRUIT JUICES BEFORE FILTRATION AND AFTER MICROFILTRATION	Printed	Georgian Engineering News № 3 2023 https://doi.org/10.36073 ISSN /1512-0187	73-74	Bibileishvili G.V., Butchuzi T.G., Mamulashvili M.A. Kakabadze E.G.
53	Environmental lead pollution and its impact on human health	Printed	Georgian Scientists Vol. 5 No. 4 (2023) https://doi.org/10.52340/gs.2023.05.04.17 E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	188-195	Mamulashvili M.A Matsaberidze E.L.
54	Processing of water and fruit juices by micro- and ultrafiltration.	Printed	Collection of Abstracts of the International Scientific-Methodological Conference "Chemistry - Achievements and Prospects" Dedicated to the 90th Anniversary of the Birth of Academician Givi Tsintsadze GTU Tbilisi 20/04/2023		Bibileishvili G.V., Gogesashvili N.N Kezherashvili M.G., Kuparadze L.P., Mamulashvili M.A. Ebanoidze L.

55	Calculation of thermodynamic initial parameters by the modified additivity method	Printed	Collection of Abstracts of the International Scientific-Methodological Conference “Chemistry - Achievements and Prospects” Dedicated to the 90th Anniversary of the Birth of Academician Givi Tsintsadze GTU Tbilisi 20/04/2023		E.L.Matsaberidze M.A.Mamulashvili
56	PARTICLE SIZES IN THE LIQUID PHASE OF VARYING CONCENTRATIONS OF POLYMERS	Printed	Georgian Engineering News № 1 vol . 2024 https://doi.org/10.36073 ISSN /1512-0187	71-73	Bibileishvili G.V., MamulaShvili M.A., Javashvili Z.D., Butkhuzi T.G. Gogiberidze I.B.
57	Investigation of the effect of polymer conformation on the characteristics of microfiltration membranes.	Printed	Georgian Engineering News № 1 vol . 2024 https://doi.org/10.36073 ISSN /1512-0187	78-81	Bibileishvili G.V., Gogesashvili N.N., Kezherashvili M.G., Mamulashvili M.A. Kakabadze E.G.
58	Recycling of used waste vegetable oils into biofuels	Printed	The international scientific conference “Environmental protection and sustainable development” dedicated to professor Victor Eristavi's memory. WORKS https://doi.org/10.36073/978-9941-512-47-6	275-282	Manana Mamulashvili Ekaterine Matsaberidze Giorgi Lazarashvili
59	Research of baromembrane processes based on cellulose acetate membrane	Printed	The international scientific conference “Environmental protection and sustainable development” dedicated to professor Victor Eristavi's memory. WORKS https://doi.org/10.36073/978-9941-512-47-6	128-135	Giorgi Bibileishvili Nana Gogesashvili Mzia Kezherashvili Liana Kuparadze Liana Ebanoидзе Manana Mamulashvili
60	EFFECT OF DIFFERENT SOLVENTS AND FORE-FORMING AGENTS ON MORPHOLOGY AND PERFORMANCE OF POLYETHERSUPHONE MEMBRANES	Printed	Oxidation Communications 47(3) (2024) Sofia, BULGARIA Impact Factor 0.541	534-542	Bibileishvili G.V., Kezherashvili M.G. Mamulashvili M.A

61	INFLUENCE OF GOAGULATION BATH TEMPERATURE ON THE MORPHOLOGY OF THE POLYAMIDE MEMBRANE	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Abstract Book EDITOR Ms. Leslie Robinson ISBN: 978-625-367-820-3 Zoom Meeting ID: 860 5266 6988 Passcode: 123456 https://us02web.zoom.us/j/86052666988? pwd=QVh6aWM5MVEz Qm 8zaEdIVmVab0Q4Zz09 August 23-25, 2024 Trabzon, Turkiye	41	Mzia Kezherashvili George Bibileishvili Manana Mamulashvili
62	CREATION OF MEMBRANE NANOTECHNOLOGIES AND NANOSYSTEMS	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Zoom Meeting ID: 860 5266 6988 Zoom Passcode: 123456 https://us02web.zoom.us/j/86052666988? pwd=QVh6aWM5MVEz Qm 8zaEdIVmVab0Q4Zz09 August 23-25, 2024 Trabzon, Turkiye	40	Manana Mamulashvili George Bibileishvili Mzia Kezerashvili Zaza Javashvili Ia Gogiberidze
63	ECONOMIC APPROACHES TO OBTAINING AND MAINTAINING QUALITY, STERILE DRINKING WATER FROM NATURAL WATERS THROUGH THE USE OF NANOTECHNOLOGICAL MEMBRANE	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Zoom Meeting ID: 860 5266 6988 Zoom Passcode: 123456 https://us02web.zoom.us/j/86052666988? pwd=QVh6aWM5MVEz Qm 8zaEdIVmVab0Q4Zz09 August 23-25, 2024 Trabzon, Turkiye	43-44	George Bibileishvili Mzia Kezerashvili Manana Mamulashvili

64	Purification of wastewater from lead crocoite production by electrodialysis method	Printed	Al Farabi 13th International Scientific Research and Innovation Congress October 17-18, 2024 / Tekirdağ, Türkiye IKSAD PUBLISHING HOUSE® All rights of this book belong IKSAD Publishing House Authors are responsible both ethically and juridically IKSAD Publications – 2024© Issued: 15.11.2024 ISBN: 00000000000000	70-71	Manana Mamulashvili Ekaterine Matsaberidze
65	Obtaining high-quality, sterile drinking water from natural waters based on membrane nanotechnologies	Printed	6. INTERNATIONAL ENVIRONMENTAL CHEMISTRY CONGRESS 05-08 November 2024 Trabzon, Türkiye CONGRESS	63	George Bibileishvili, Manana Mamulashvili, Ia Gogiberidze, Elene Kakabadze, Tinatin Butkhuzi
66	Research on formation and phase inversion process of polymer composition of natural water microfiltration membrane	Printed	6. INTERNATIONAL ENVIRONMENTAL CHEMISTRY CONGRESS 05-08 November 2024 Trabzon, Türkiye CONGRESS	87	George Bibileishvili, Mzia Kezherashvili, Manana Mamulashvili
67	Experimental study of the dependence of viscosity on productiviti in filtration solutions	Printed	Georgian Scientists vol. 6 N 3, 2024 https://doi.org/10.52340/gs_2024.06.04.34 E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	371-374	Manana Mamulashvili, George Bibileishvili, Tinatin Butkhuzi, Zaza Javashvili Elene Kakabadze, Liana Ebanoidez
68	Analysis of local and international patents for microfiltration process of different types of wine material	Printed	Georgian Scientists vol. 6 N 3, 2024 https://doi.org/10.52340/gs_2024.06.04.34 E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	375-378	Elene Kakabadze, George BibileiSvili, Leila Tananashvili, Zaza Javashvili, Manana MamulaShvili, Liana Ebanoidez

