

**EUROPEAN
CURRICULUM VITAE
FORMAT**



Personal information

First name(s) / Surname(s) **Nikolay Lyubenov Nikolov**

Address(es)

Telephone(s)

Mobile:

E-mail nickn@tu-sofia.bg

Nationality Bulgarian

Date of birth

Gender Male

Work experience

Dates 07.2022 – present

Occupation or position held Professor

Main activities and responsibilities Education and training, science

Name and address of employer "Mechanisms and Machine Theory" Department, Faculty of Industrial Technology, Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria

Type of business or sector University Education

Dates 2005 – 07.2022

Occupation or position held Associated Professor

Main activities and responsibilities Education and training, science

Name and address of employer "Mechanisms and Machine Theory" Department, Faculty of Industrial Technology, Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria

Type of business or sector University Education

Dates 2001 – 2005

Occupation or position held Assistant Professor

Main activities and responsibilities Education and training, science

Name and address of employer "Mechanisms and Machine Theory" Department, Faculty of Industrial Technology, Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria

Type of business or sector University Education

Dates 2006 – present

Occupation or position held Head of "Mechanisms and Machine Theory" Department

Main activities and responsibilities Managerial administrative position

Name and address of employer "Mechanisms and Machine Theory" Department, Faculty of Industrial Technology, Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria

Type of business or sector Educational

Dates 2018 – 2019

Occupation or position held Data Protection Officer of Technical University of Sofia

Main activities and responsibilities	Managerial administrative position
Name and address of employer	Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Type of business or sector	Educational
Dates	2015 – present
Occupation or position held	Head of Laboratory "Digital Manufacturing of Implants"
Main activities and responsibilities	Managerial administrative position
Name and address of employer	Faculty of Industrial Technology, Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Type of business or sector	Research Educational
Dates	2020 – present
Occupation or position held	Assistant-Rector of Technical University of Sofia
Main activities and responsibilities	Managerial administrative position
Name and address of employer	Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Type of business or sector	Educational

Education and training

Dates	2013
Title of qualification awarded	DSc of „Theory of Mechanisms, Machines and Automated Lines”
Principal subjects/occupational skills covered	Synthesis and Analysis of Mechanisms
Name and type of organisation providing education and training	Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Level in national or international classification	9
Dates	2001
Title of qualification awarded	PhD of „Theory of Mechanisms, Machines and Automated Lines”
Principal subjects/occupational skills covered	Synthesis and Analysis of Mechanisms
Name and type of organisation providing education and training	Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Level in national or international classification	9
Dates	1996 – 1998
Title of qualification awarded	M. Sc., “Applied Mathematics and Informatics”
Principal subjects/occupational skills covered	Applied Mathematics and Informatics
Name and type of organisation providing education and training	Technical University of Sofia, 8 "Kliment Ohridski" Blvd., Sofia 1000, Bulgaria
Level in national or international classification	7
Dates	1990 – 1995
Title of qualification awarded	“Mechanical Engineering”, RU “Angel Kunchev” – Rousse
Principal subjects/occupational skills covered	Mechanical Engineering
Name and type of organisation providing education and training	RU “Angel Kunchev” – Rousse
Level in national or international classification	7

Personal skills and competences

Mother tongue(s)

Bulgarian

Other language(s)

Self-assessment

European level ()***English****Russian****Serbian**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user
A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

(*) *Common European Framework of Reference for Languages*

Social skills and competences

Team work: Good communication skills and team work abilities, also organizational tasks providing.

Organisational skills and competences

I often became in organizer position in job and life.

Technical skills and competences

Technical sciences – Engineering and industrial systems: Design (Synthesis and Analysis) of Mechanisms for Machines, Appliances and Devices with Various Functions as Specialized Robots and Mechatronic Devices for Automation, CAD/CAM/CAE Technologies, Virtual Prototyping, Virtual Engineering, Rapid Prototyping, MEMS, Sensors.

Computer skills and competences

- professional computer user, knowledge of all common applications, MS Office, Solid Works, AutoCAD, MSC Adams, Maple.

Other skills and competences

Driving licence

I am a holder of a Bulgarian driver's license. Vehicle categories B and M.

Additional information

Participant in 27 scientific research projects, 8 of which he was the head of.
Some of which are:

Coordinator of:

1. ДН17/23, Research and development of methods and means for rapid digital construction and rapid materialization of personalized IMplants through hybrid TECHNOLOGIES - IMTECH, national funding
2. BG161PO003-1.2.04-0037-C0001/2013 "Infrastructure for rapid digital construction and materialization of personal bone and dental implants". OP "Development of the competitiveness of the Bulgarian economy" 2007-2013

Member of project working team:

1. BG05M2OP001-1.001-0008 „ National Center for Mechatronics and Clean Technologies “
2. "Low carbon energy for transport and household (EPLUS)", DO1-214 with national funding

Winner of national awards:

- The Silver Sign of Bulgarian Industrial Association for Design of Ladling Robot FEEDMAT 2 (2004);
- The Award YOUNG INVENTOR of 2006 of "EVRIKA" Foundation;
- The Award YOUNG ENGINEER OF THE YEAR FOR 2006 r. of Federation of Science-Technical Unions in Bulgaria.

ANNEXES

Representative achievements

ANNEX 1. Representative achievements

Publications:

Zagorski, M., Todorov, G., Nikolov, N., Sofronov, Y., Kandeveva, M.
Investigation on wear of biopolymer parts produced by 3D printing in lubricated sliding conditions
Industrial Lubrication and Tribology, 2022, 74(3), pp. 360–366
https://www.scopus.com/record/display.uri?eid=2-s2.0-85126270272&origin=resultslist&sort=plf-f&featureToggles=FEATURE_NEW_DOC_DETAILS_EXPORT:1
DOI: 10.1108/ILT-06-2021-0214

Marinov, M.B., Nikolov, N., Dimitrov, S., Todorov, T., Stoyanova, Y., Nikolov, G.T.
Linear Interval Approximation for Smart Sensors and IoT Devices
Sensors, 2022, 22(3), 949
https://www.scopus.com/record/display.uri?eid=2-s2.0-85123321459&origin=resultslist&sort=plf-f&featureToggles=FEATURE_NEW_DOC_DETAILS_EXPORT:1
DOI: 10.3390/s22030949

Ganev, B., Ivanov, A., Marinov, M., Nikolov, N., Kochev, L.
Pendulum Experimental Study and Analysis with MEMS Accelerometer
2021 30th International Scientific Conference Electronics, ET 2021 - Proceedings, 2021
https://www.scopus.com/record/display.uri?eid=2-s2.0-85119003595&origin=resultslist&sort=plf-f&featureToggles=FEATURE_NEW_DOC_DETAILS_EXPORT:1
DOI: 10.1109/ET52713.2021.9579906

Kamberov, K., Todorov, G., Sofronov, Y., Nikolov, N.
Methodology for designing, manufacturing and integration of personalized spinal implants for surgical treatment of the cervical spine
AIP Conference Proceedings, 2021, 2333, 110009
https://www.scopus.com/record/display.uri?eid=2-s2.0-85102778599&origin=resultslist&sort=plf-f&featureToggles=FEATURE_NEW_DOC_DETAILS_EXPORT:1
DOI: 10.1063/5.0042381

Nikolov, D., Ganev, B., Marinov, M.B., Nikolov, N.
Smart Sensor Node for Distributed Noise Monitoring
(2020) 2020 29th International Scientific Conference Electronics, ET 2020 - Proceedings, art. no. 9238169,
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097100616&doi=10.1109%2fET50336.2020.9238169&partnerID=40&md5=9b1c88b861af39bbbb6cc8d6648a2483>
DOI: 10.1109/ET50336.2020.9238169

Kandeveva, M., Svoboda, P., Nikolov, N., Todorov, T., Sofronov, Y., Pokusová, M., Vencl, A.
Effect of silicon carbide nanoparticles size on friction properties of electroless nickel coatings
(2020) Journal of Environmental Protection and Ecology, 21 (4), pp. 1314-1325.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85095828950&partnerID=40&md5=70d8d17342922835b6475daf81f89953>

Todorov, T., Valchev, S., Moll, F., Nikolov, N., Nikolov, R.
Combined Piezoelectric Vibroimpact Energy Harvester with Improved Performance
(2019) Proceedings - 2019 1st International Conference on Control Systems, Mathematical Modelling, Automation and Energy Efficiency, SUMMA 2019, art. no. 8947624, pp. 650-655.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078187499&doi=10.1109%2fSUMMA48161.2019.8947624&partnerID=40&md5=87550e073046ad3c9d570d2547cf3402>
DOI: 10.1109/SUMMA48161.2019.8947624

Todorov, T., Nikolov, N., Nikolov, R., Sofronov, Y., Kochev, L.
Optimization of micro-electro-mechanical piezoelectric energy harvesters with interdigitated electrodes
(2019) Journal of the Balkan Tribological Association, 25 (3), pp. 535-545.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081207578&partnerID=40&md5=e4419478ba2ec9d0683bf15fed897984>

Todorov, G., Nikolov, N., Sofronov, Y., Gabrovski, N., Laleva, M., Gavrilov, T.

Computer aided design of customized implants based on CT-scan data and virtual prototypes
(2019) Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, 283, pp. 339-346.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075248741&doi=10.1007%2f978-3-030-23976-3_30&partnerID=40&md5=0798364be2e829becdfe02872f462549
DOI: 10.1007/978-3-030-23976-3_30

Todorov, G., Nikolov, N., Sofronov, Y., Gabrovski, N., Laleva, M., Gavrilo, T.
Additive/subtractive computer aided manufacturing of customized implants based on virtual prototypes
(2019) Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, 283, pp. 347-360.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075244093&doi=10.1007%2f978-3-030-23976-3_31&partnerID=40&md5=bf7148df86f46a1577adae8062586e4d
DOI: 10.1007/978-3-030-23976-3_31

Todorov, T., Nikolov, N., Todorov, G., Ralev, Y.
Modelling and investigation of a hybrid thermal energy harvester
(2018) MATEC Web of Conferences, 148, art. no. 12002, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041746180&doi=10.1051%2fmateconf%2f201814812002&partnerID=40&md5=2fa2fe7d6dd5831a5604ba33aed59aa6>
DOI: 10.1051/mateconf/201814812002

Jivkov, V., Zahariev, E., Nikolov, N.
Rotating cantilever beam with variable geometry – Frequencies and modal vectors
(2018) Comptes Rendus de L'Academie Bulgare des Sciences, 71 (8), pp. 1108-1115.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85051499173&doi=10.7546%2fCRABS.2018.08.13&partnerID=40&md5=21114b99cfdda1e63ec2d7f1ed97e329>
DOI: 10.7546/CRABS.2018.08.13

Jivkov, V., Nikolov, N., Philipoff, Ph.
Wheels slip angles in a hybrid vehicle with KERS during movement in a turn
(2017) Journal of the Balkan Tribological Association, 23 (1), pp. 23-36.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85031100689&partnerID=40&md5=f3452d5410baae5b0f7a469ebf3aa6d1>

Jivkov, V., Philipoff, Ph., Nikolov, N.
Velocities in contact area of turning elastic tires
(2016) Journal of the Balkan Tribological Association, 22 (3-I), pp. 2210-2217.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020504553&partnerID=40&md5=5a4f802d09b1a193eb653737d5f479d4>

Kandeva, M., Karastoyanov, D., Ivanova, B., Dimitrova, A., Sofronov, Y., Nikolov, N.
Friction and wear of Ni coatings with nanosize particles of SiC
(2014) 5th World Tribology Congress, WTC 2013, 3, pp. 2569-2572.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84919474514&partnerID=40&md5=26ad7d992007049064e3aea90f20bc84>

Todorov, G., Peikov, V., Kamberov, K., Nikolov, N.
POWER TOOLS PNEUMATIC IMPACT MECHANISM MODELLING AND ROBUST ANALYSIS
SIXTH INTERNATIONAL SYMPOSIUM ABOUT FORMING AND DESIGN IN MECHANICAL ENGINEERING
Book Group Author(s): ADEKO, Pages: 119-124, Published: 2010, Document Type: Proceedings Paper
https://apps.webofknowledge.com/InboundService.do?product=WOS&Func=Frame&DestFail=http%3A%2F%2Fwww.webofknowledge.com&SrcApp=RRC&locale=en_US&SrcAuth=RRC&SID=D4UFxpIPRvfZfk7p6C&customersID=RRC&mode=FullRecord&IsProductCode=Yes&Init=Yes&action=retrieve&UT=WOS%3A000397473500019

BG662 (Y1) — 2004-03-31
MANIPULATOR SERVING METAL CASTING MACHINES
GALABOV VITAN B [BG]; SLAVKOV VENTSISLAV I [BG]; SLAVOV GOCHO D [BG]; VITKOV VLADIMIR J [BG]; DELCHEV KAMEN K [BG]; NIKOLOV NIKOLAJ L [BG]
https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=662Y1&KC=Y1&FT=D&ND=4&date=20040331&DB=&ocale=en_EP

BG64863 (B1) — 2006-07-31

FOUNDRY DOSING MANIPULATOR

GULUBOV VITAN [BG]; SLAVKOV VENTSISLAV [BG]; NIKOLOV NIKOLAY [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=64863B1&KC=B1&FT=D&ND=3&date=20060731&DB=&locale=en_EP

BG65641 (B1) — 2009-04-30

MANIPULATOR

GULUBOV VITAN [BG]; NIKOLOV NIKOLAY [BG]; SAVCHEV SVETOSLAV [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=65641B1&KC=B1&FT=D&ND=4&date=20090430&DB=&locale=en_EP

BG65582 (B1) — 2009-01-30

CASTING MANIPULATOR

GULUBOV VITAN [BG]; SAVCHEV SVETOSLAV [BG]; NIKOLOV NIKOLAY [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=65582B1&KC=B1&FT=D&ND=4&date=20090130&DB=&locale=en_EP

BG109458 (A) — 2007-09-28

TRAINER

GULUBOV VITAN [BG]; NIKOLOV NIKOLAY [BG]; SAVCHEV SVETOSLAV [BG]; TERZIEV DEYAN [BG]; DOLCHINKOV RADOSTIN [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20070928&CC=BG&NR=109458A&KC=A

BG2244 (U1) — 2016-06-30

PLANETARY GEAR MECHANISM

TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; PEYKOV VELICHKO [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20160630&CC=BG&NR=2244U1&KC=U1

BG66535 (B1) — 2016-06-30

SERVO VALVE WITH DIRECT DIGITAL CONTROL

TODOROV GEORGI; NIKOLOV NIKOLAY; PEYKOV VELICHKO

https://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20160630&DB=EPODOC&locale=en_EP&CC=BG&NR=66535B1&KC=B1&ND=4

BG66952 (B1) — 2019-08-30

HYDRAULIC LIFT WITH KINETIC ENERGY BATTERY

ZHIVKOV VENELIN [BG]; DRAGANOV VATKO [BG]; DANCHEV IVAN [BG]; KOCHEV LACHEZAR [BG]; NIKOLOV NIKOLAY [BG]; MARINOV FILIP [BG]; STOYANOVA YANA [BG]; TODOROV GEORGI [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=66952B1&KC=B1&FT=D&ND=4&date=20190830&DB=&locale=en_EP

BG1974 (U1) — 2014-10-31

HYDRAULIC LIFT WITH KINETIC ENERGY BATTERY

ZHIVKOV VENELIN [BG]; DRAGANOV VATKO [BG]; DANCHEV IVAN [BG]; KOCHEV LACHEZAR [BG]; NIKOLOV NIKOLAY [BG]; MARINOV FILIP [BG]; STOYANOVA YANA [BG]; TODOROV GEORGI [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=1&ND=3&adjacent=true&locale=en_EP&FT=D&date=20141031&CC=BG&NR=1974U1&KC=U1

BG66751 (B1) — 2018-10-31

METHOD FOR CREATING WOUND SUPER FLYWHEEL FROM FILAMENT OR STRIP

ZHIVKOV VENELIN [BG]; TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; DRAGANOV VATKO [BG]; CHAKMAKOV GEORGI [BG]; KOCHEV LACHEZAR [BH]; GEORGIEV CHAVDAR [BG]; STOYANOVA YANA [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=66751B1&KC=B1&FT=D&ND=4&date=20181031&DB=&locale=en_EP

BG1946 (U1) — 2014-08-29

PRESTRESSED SUPER-FLYWHEELS WOUND FROM THREADS OR BANDS

ZHIVKOV VENELIN [BG]; TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; DRAGANOV VATKO [BG]; CHAKMAKOV GEORGI [BG]; KOCHEV LACHEZAR [BG]; GEORGIEV CHAVDAR [BG]; STOYANOVA YANA [BG]
https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20140831&CC=BG&NR=1946U1&KC=U1

BG1989 (U1) – 2014-11-28

PLATFORM FOR THE TRANSPORTATION OF PEOPLE IN WHEELCHAIRS ON STAIRS

IVANOV TSVETOZAR [BG]; TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20141128&CC=BG&NR=1989U1&KC=U1

BG1954 (U1) – 2014-08-29

CONTACT SYSTEM FOR ELECTRICAL CABINETS WITH MOVABLE CHASSIS

NIKOLOV NIKOLAY [BG]; TODOROV GEORGI [BG]; GROZDANOVA SNEZHANKA [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20140831&CC=BG&NR=1954U1&KC=U1

BG2135 (U1) – 2015-10-30

UNINTERRUPTIBLE POWER SUPPLY SYSTEM

ZHIVKOV VENELIN [BG]; TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; IVANOV TSVETOZAR [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20151030&CC=BG&NR=2135U1&KC=U1

BG111776 (A) – 2016-02-29

PLANETARY REDUCTION GEAR

TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; SOFRONOV YAVOR [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20160229&CC=BG&NR=111776A&KC=A

BG3270 (U1) – 2019-09-30

HELIOCENTRIC GEAR REDUCER

TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; SOFRONOV YAVOR [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20190930&CC=BG&NR=3270U1&KC=U1

BG2219 (U1) – 2016-04-28

JOYSTICK

TODOROV GEORGI; NIKOLOV NIKOLAY; ZABCHEV GEORGI

https://worldwide.espacenet.com/publicationDetails/biblio?II=1&ND=3&adjacent=true&locale=en_EP&FT=D&date=20160428&CC=BG&NR=2219U1&KC=U1

BG112068 (A) – 2017-01-31

JOYSTICK

NIKOLOV NIKOLAY; TODOROV GEORGI; ZABCHEV GEORGI

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20170131&CC=BG&NR=112068A&KC=A

BG2655 (U1) – 2017-06-30

MODULE FOR UNINTERRUPTED ELECTRIC CHARGING WITH A KINETIC ACCUMULATOR OF ENERGY

TODOROV GEORGI [BG]; NIKOLOV NIKOLAY [BG]; KAMBEROV KONSTANTIN [BG]

https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20170630&CC=BG&NR=2655U1&KC=U1

BG67358 (B1) – 2021-07-15

METHOD OF DESIGNING PATIENT-SPECIFIC IMPLANTS FOR SURGICAL TREATMENT OF DISEASES IN THE CERVICAL SPINE

TODOROV GEORGI; GABROVSKI NIKOLAY; KAMBEROV KONSTANTIN; NIKOLOV NIKOLAY; SOFRONOV YAVOR; TEODOSIEV DIMITAR; GAVRILOV TODOR

https://worldwide.espacenet.com/publicationDetails/biblio?CC=BG&NR=67358B1&KC=B1&FT=D&ND=5&date=20210715&DB=&locale=en_EP