SCIENTIFIC CURRICULUM VITAE

1. Personal details

Full name	Nguyen Khac Tuan		
Academic title	Assoc. Prof		
Administrative position	Vice rector		
Date of birth	26/06/1977		
Sex	Male		
ID Number	090709254		
Department	Division of Automotive Engineering		
Institution	Thai Nguyen University of Technology		
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2. Qualifications

No	Years	Academic institutions	Major/ Specialty	Academic degree
1	09/1995-05/2000	Thai Nguyen university of technology	Automotive and power machinery engineering	Engineer
2	09/2001-12/2003	Hanoi university of technology	Automotive engineering	Msc.
3	12/2006-04/2011	Moscow State University of Mechanical Engineering (MAMI)	wheeled and tracked vehicles	Dr

- Title of master thesis: Modelling and simulation of dynamic loads of hydro-mechanical transmission of vehicle
- Title of doctoral desertation: Selection of ways to reduce dynamic loads in the mechanical transmission of vehicle withu hybrid power units.

3. Professional experience

No	Years	Institution	Professional address	Position
1	08/2000-05/2005	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Lecturer
2	10/2001-10/2003	Hanoi University of Science and Technology	1, Dai Co Viet - Ha Noi, Viet Nam	Master student
3	5/2005-12/2006	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Vice dean of school of power machinery engineering
4	12/2006-04/2011	Moscow State University of Mechanical Engineering (MAMI)	Thai Nguyen city, Viet Nam	Postgraduate student
5	05/2011-11/2011	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Lecturer
6	11/2011-09/2013	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Vice dean of Faculty of Mechanical engineering
7	09/2013-06/2014	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Head of school of Automotive and power machinery engineering
8	06/2014-07/2017	Thai Nguyen university of Technology	Thai Nguyen city, Viet Nam	Dean of Faculty of Automotive and power machinery engineering
9	8/2017-11/2023	Thai Nguyen University of Technology - Thai Nguyen University	Thai Nguyen city, Viet Nam	Manager of Office of Human Resources and Administration
10	11/2023-present	Thai Nguyen University of Technology - Thai Nguyen University	Thai Nguyen city, Viet Nam	Vice rector

4. Language (rating: A- Poor/ deficient; B- Fair; C- Sufficient; D- Fluent)

Language	Reading	Writing	Speaking
English	C	C	C
Russian	D	C	C

5. Expertise and research interests

5.1. *Main research orientation:*

- Vibration and Stability;
- Vehicle dynamic and automotive powertrain system;
- Optimal Design of Mechanical Transmission System.

5.2. *List of research projects*

List all the research grants/ projects received the last 5 years.

No	Project name	Funding institution & funded amount	Project duration	Position/ role in the project
1	Study on design of selfpropelled locomotion	Ministry of Education and Training	01/2019-12/2020	Coordinator

5.3. Publications and accomplishments

1. Nguyễn Trọng Hoan, Nguyễn Khắc Tuân, Mô phỏng và tính toán động lực học hệ thống truyền lực thủy cơ ô tô, Tạp chí Cơ khí Việt Nam, № 98/5, pp.46-48, 2005
2. Selifonov V.V, Nguyen Khac Tuan, Разработка динамической модели механической трансмиссии автомобиля с комбинированной энергетической установкой параллельного типа,Сборник «65-ая Международная научно-техническая конференция Ассоциации автомобильных инженеров (ААИ) МГТУ «МАМИ». 2009
3. Selifonov V.V, Nguyen Khac Tuan, Метод определения динамических нагрузок в трансмиссиях автомобилей с гибридными силовыми установками при запуске ДВС с ходу Сборник «65-ая Международная научно-техническая конференция Ассоциации автомобильных инженеров (ААИ) МГТУ «МАМИ». 2009
4. Ovsianhikov E. M, Nguyen Quang Thieu, Nguyen Khac Tuan, Правление тяговым асинхронным электроприводом гибридных автомобилей по минимуму потерь и максимуму перегрузочной способности, Сборник «65-ая Международная научно-техническая конференция Ассоциации автомобильных инженеров (ААИ) - МГТУ «МАМИ» 120 – 129. 2009
5. Nguyen Khac Tuan, Исследование влияния структурных параметров на динамические нагрузки в механической трансмиссии автомобиля с гибридными силовыми установками, Известия МГТУ «МАМИ» №2(10) – С. 75-78 – 2010
6. Nguyen Khac Tuan, Моделирование и расчет динамических нагрузок в механической трансмиссии автомобиля с гибридными силовыми установками в среде программирования Matlab Simulink, «International scientific and technical conference Control vibration technologies and machines IX », Курск, 2010 – С. 96–102.
7. Nguyen Khac Tuan, Нагруженность механической трансмиссии автомобиля с гибридными силовыми установками при запуске ДВС с ходу, Сборник науч.

конф. «Исследование, разработка и применение высоких технологий в промышленности » – С.-Петербург 240 – 244, 2010
8. Nguyen Khac Tuan, Применение пакета Simulink-matlab для исследования динамических моментов в трансмиссии автомобилей с гибридными силовыми установками (ГСУ) , Сборник науч. конф. «Наука и образование в развитии промышленной, социальной и экономической сфер регионов России» "Регионы России Владимир, 274–277, 2010.
9. Nguyen Khac Tuan, Математическая модель трансмиссии автомобиля с гибридной силовой установкой смешанного типа, Сборник Международной конференции по дифференциальным уравнениям и динамическим системам – Суздаль, с.138 -139, 2010
10. Selifonov V.V, Nguyen Khac Tuan, Исследование влияния структурных параметров на динамические нагрузки в механической трансмиссии автомобиля с гибридными силовыми установками, Электронное научно-техническое издание «Наука и образование». № 1. http://technomag.edu.ru/doc/165187.html, 2011
11. Selifonov V.V, Nguyen Khac Tuan, Выбор путей снижения динамических нагрузок в механической трансмиссии автомобиля с комбинированной энергической установкой при запуске ДВС с ходу Электронное научно-техническое издание «Наука и образование».№ 1. http://technomag.edu.ru/doc/165160.html, 2011
12. Nguyen Khac Tuan, Nguyen Khac Minh, Метод моделирования процесса торможения автомобиля с антиблокировочной системой тормозов, Научно-практический журнал Отраслевые аспекты технических наук, № 3. 12 -15, 2011
13. Nguyen Khac Tuan, Le Van Quynh, Modeling and Simulation of Vehicle Vertical Vibration from Powertrain and Road Excitations, ISTS, 21-24/11/2012, Bangkok, Thailand, pp. 512-515, 2012
14. Le Van Quynh, Nguyen Khac Tuan, Nguyen Van Liem, Research on the influence of heavy truck vibration on highway road surface Viet Nam, the 9th National Scientific Conference of Mechanics, 887-894, 2012
15. Nguyen Van Liem, Le Van Quynh, Nguyen Khac Tuan, Influence of cab suspension system on heavy ride comfort under random road excitation, Journal of Science and Technology (Technical Universities), 82(3) (in Vietnamese). 91-93, 2013
16. Nguyen Khac Tuan, Mô phỏng dao động của ô tô khi phanh, Hội nghị Khoa học và công nghệ toàn quốc về cơ khí, Hà Nội, 2013
17. Le Van Quynh, Nguyen Khac Tuan, Một phương pháp thí nghiệm đánh giá độ êm dịu của xe lu rung. Tạp chí KHCN đại học Thái Nguyên 118(04), 55-59, 2014
18. Nguyen Thanh Cong, Nguyen Khac Tuan, Le Van Quynh, Nghiên cứu ảnh hưởng của thông số thiết kế hệ thống treo đến độ êm dịu xe đua F-SAE. Tạp chí KHCN đại học Thái Nguyên 118(04), pp. 49-54, 2014

19. Nguyen Khac Tuan, Nguyen Minh Chau, Hoang Anh Tan, Kinematic and dynamic modeling and simulation of crankmechanic of automobile, Tạp chí KHCN Đại học Thái Nguyên 139(09), pp.19-24, 2015
20. Nguyễn Khắc Tuân, Nguyễn Khắc Minh, Ngô Văn Giang, Một phương pháp tính toán động lực học của ly hợp ma sát trên ô tô, Hội nghị khoa học toàn quốc Cơ học vật rắn biến dạng lần thứ XII, Đại học Duy Tân, Đà Nẵng, 2015
21. Vu Ngoc Pi, Nguyen Khac Tuan, Optimum Determination of Partial Transmission Ratios of Three-Step Helical Gearboxes for Getting Minimum Cross Section Dimension, Journal of Environmental Science and Engineering A 5, 570-573, 2016
22. Vu Ngoc Pi, Nguyen Thi Hong Cam, Nguyen Khac Tuan, Optimum Calculation of Partial Transmission Ratios of Mechanical Driven Systems Using a V-belt and a Two-Step Bevel Helical Gearbox, Journal of Environmental Science and Engineering A 5, 566-569, 2016
23. Nguyen Khac Tuan, Vu Ngoc Pi, Optimum Determination of Partial Transmission Ratios of Mechanical Driven Systems Using a V-belt and a Helical Gearbox with Second-Step Double Gear-Sets, Journal of Environmental Science and Engineering A 6 (2017), pp. 337-380, 2017
24. Dang Anh Tuan, Nguyen Khac Tuan, Vu Ngoc Pi, Optimum Determination of Partial Transmission Ratios of Mechanical Driven Systems Using a V-belt and a Three-Step Helical Gearbox, Journal of Environmental Science and Engineering B 6 (2017), 328-331, 2017
25. Nguyễn Khắc Tuân, Cảnh Chí Huân, Nghiên cứu ảnh hưởng của mô men kích thích động cơ đến tải trọng tác dụng lên hệ thống truyền lực thủy cơ ô tô, Tạp chí cơ khí Việt Nam, số đặc biệt, 3/2017, pp.278-283, 2017
26. Nguyễn Khắc Tuân, Nghiên cứu ảnh hưởng của chế độ phanh đến năng lượng tái sinh khi phanh, Tạp chí Khoa học & Công nghệ, Đại học Thái Nguyên số 169(09), pp. 171-175, 2017
27. Nguyen Khac Tuan, L. Karpukhin, A. Saikin, D. Endachev, A. Terenchenko, Development of electric vehicles with a driverless options, Tạp chí cơ khí Việt Nam, số đặc biệt, 3/2017, pp.354-360 2017
28. Nguyễn Khắc Tuân, Đỗ Thị Tám, Đậu Xuân Hà, Cân bằng công suất trên ô tô hybrid sử dụng sơ đồ song song, Tạp chí cơ khí Việt Nam, số đặc biệt, 3/2017, pp. 301-305, 2017
29. Nguyen Khac Tuan, A computer method for calculating the traction-speed characteristics of automotive vehicle equipped with hydromechanical transmission http://7universum.com/ru/tech/archive/item/5644, 2018
30. Nguyen Khac Tuan, Nguyen Kieu Hung, Выбор метода компьютерного моделирования для изучения влияния параметров подвески на комфорт езды гоночного автомобиля «Формула Студент», http://7universum.com/ru/tech/archive/item/5893, 2018

31. Nguyen Khac Tuan, Kirill E. K., Aleksey S. T, Aleksey F. K. World trends in the development of vehicles with alternative energy sources ARPN Journal of Engineering and Applied Sciences, pp. 2535-2542, 2018.
32. Le Van Quynh, Nguyen Khac Tuan, Optimal Design Parameters of Cab's Isolation System for Vibratory Roller Using a Multi-Objective Genetic Algorithm, Applied Mechanics and Materials ISSN: 1662-7482, Vol. 875, pp. 105-112, 2018
33. Nguyen Khac Tuan, Vu Ngoc Pi, Nguyen Thi Hong Cam, Determining Optimal Gear Ratios of a Two-stage Helical Reducer for Getting Minimal Acreage of Cross Section, MATEC Web of Conferences 2018
34. Nguyen Thi Hong Cam, Vu Ngoc Pi, Nguyen Khac Tuan, Le Xuan Hung and Tran Thi Phuong Thao, A Study on Determination of Optimum Partial Transmission Ratios of Mechanical Driven Systems Using a Chain Drive and a Three-Step Helical Reducer, Lecture Notes in Networks and Systems- Springer, pp.91-99, 2018
35. Nguyen Thi Hong Cam, Vu Ngoc Pi, Nguyen Khac Tuan, Le Xuan Hung, and Tran Thi Phuong Thao, Determining Optimal Partial Transmission Ratios of Mechanical Driven Systems Using a V-Belt Drive and a Helical Reducer with Second-Step Double Gear-Sets, Lecture Notes in Networks and Systems- Springer, pp.261-269, 2018
36. Nguyen Khac Tuan, Vu Van Hai, Hoang Anh Thai, Influence of Engine Torque on Vehicle Ride Comfort, Lecture Notes in Networks and Systems- Springer, pp. 364-371, 2018
37. Nguyen Khac Tuan, Tran Thi Phuong Thao, Nguyen Thi Hong Cam, Le Xuan Hung, and Vu Ngoc Pi, Optimum Calculation of Partial Transmission Ratios of Mechanical Driven Systems Using a V-Belt and a Three-Step Bevel Helical Gearbox, https://doi.org/10.1007/978-3-030-04792-4_61, Lecture Notes in Networks and Systems- Springer, pp.469-476, 2018
38. NguyenVan Liem, Nguyen Khac Tuan, Evaluating the effect of the working conditions on the ride comfort and road friendliness of the heavy truck, Vibroengineering PROCEDIA, p. 83-88, 2018
39. NguyenVan Liem, Nguyen Khac Tuan, Enhancing the ride comfort of the off-road vibratory roller cab by adding damper hydraulic mount, https://doi.org/10.21595/vp.2018.20339, Vibroengineering PROCEDIA, p. 89-95 2018
40. Nguyen Khac Tuan, Modeling and Simulation of Series Parallel Hev Using Matlab/Simulink, IJMET, pp.1590-1599, 2018
41. Nguyen Khac Tuan, Vu Ngoc Pi , Nguyen Thi Hong Cam, Tran Thi Phuong Thao, Ho Ky Thanh, Le Xuan Hung, Hoang Thi Tham, Determining Optimal Gear Ratios of a Two-stage Helical Reducer for Getting Minimal Acreage of Cross Section, MATEC Web Conf., 2018
42. Optimum Calculation of Partial Transmission Ratios of Mechanically Driven Systems Using a V-Belt and a Helical Gearbox with First-Step Double Gear Sets
43. Nguyen Khac Tuan, Impact of Road Surface Roughness and Engine Torque on the Load of Automotive Transmission System, IJMET, 1752-1761,2019

44. Nguyen Khac Tuan, An Investigation of the Influence of Inter-Wheel Differentials on the Kinetic and Dynamic of 4WD Vehicle, International Journal of Applied Engineering Research, pp. 2359-2367, 2019
45. Nguyen Khac Tuan IJMET, The influence of driving axle location on the lateral force of vehicle, p.11-18, 2019
46. Nguyen K.M., Karpukhin K.E., Kolbasov A.F., Nguyen K.T., The problem of operating electric vehicles in difficult climatic conditions, Trudy NAMI, 2019, no. 3 (278), 2019
47. Nguyen Khac Tuan Nguyen Khac Minh, Исследование влияния параметров системы подвески и условий эксплуатации на плавность движения автомобиля, Научный журнал «Universum: технические науки», 2019
48. Nguyen Khac Tuan et al, Modelling of a Vibration-Driven Module for Capsule Locomotion Systems, Transstellar Journal Publications and Research Consultancy Private Limited (TJPRC), pp.837–850,2020
49. Nguyen, K.-T., La, N.-T., Ho, K.-T., Ngo, Q.-H., Chu, N.-H., Nguyen, V.-D., The effect of friction on the vibro-impact locomotion system: modeling and dynamic response, Volume 56, 2121-2137, 2021
50. Minh, N.K., Vu, D.H., Hung, M.D., Van Hai, V., Tuan, N.K., A Study on Characteristics of Dynamics and Kinematics of the Vehicle Equipped with Dual-Clutch Automatic Transmission, Lecture Notes in Networks and Systems Volume 366 LNNS, pp. 107-116, 2022
51. Duong, TH., Van, C.N., Ho, KT. et al., Dynamic response of vibro-impact capsule moving on the inclined track and stochastic slope, Meccanica 58, pp. 421–439, 2023
52. Bazavluk, S.; Kurmaev, R.; Karpukhin, K.E.; Minh, N.K.; Tuan, N.K., Trends in the Development of Battery Thermal Management Systems on Electric Vehicles, Lecture Notes in Networks and Systems, 2023