

ACTUAL

MAESTRIA EN CIENCIAS EN INGENIERIA ELECTROMAGNETICA			
ACUERDO	FECHA	NOMBRE DEL PROFESOR	DEPARTAMENTO
671.6.1	22/09/2022	Dr. Felipe de Jesús González Montañez	Energía
649.3.8	10/06/2021	Dr. Víctor Manuel Jiménez Mondragón	Energía
679.3.2	16/02/2023	Dr. Jesús Ulises Liceaga Castro	Electrónica
679.3.2	16/02/2023	Dr. Irvin López García	Energía

PROPUESTA

MAESTRIA EN CIENCIAS EN INGENIERIA ELECTROMAGNETICA			
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671.6.1	22/09/2022	Dr. Felipe de Jesús González Montañez	Energía
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679.3.2	16/02/2023	Dr. Jesús Ulises Liceaga Castro	Electrónica
679.3.2	16/02/2023	Dr. Irvin López García	Energía
	17/03/2025	Dra. Irma Siller Alcalá	Electrónica

Dr. Rafael Escarela Pérez
Director de la División de Ciencias Básicas e Ingeniería (CBI)
Universidad Autónoma Metropolitana – Azcapotzalco (UAMA)
Presente

Por este medio le solicito amablemente tenga a bien presentar al Consejo Divisional de CBI que usted preside, la siguiente lista de Profesores de nuestra División para integrar el Comité de Estudios de la Maestría en Ciencias en Ingeniería Electromagnética:

- 1) Dra. Irma Irasema Siller Alcalá

Anexo cartas originales firmadas por los Profesores, en las que aceptan ser considerados para formar parte del Comité de Estudios. También incluyo copia electrónica de sus CVs.

Sin otro particular a tratar, aprovecho la oportunidad para enviarle un cordial saludo

A t e n t a m e n t e
"Casa Abierta al Tiempo"


Dr. Juan Carlos Olivares Galván
Coordinador de la Maestría en Ciencias en Ingeniería Electromagnética
E-mail: jolivares@azc.uam.mx



Vo. Bo.

Dr. Jesús Ulises Liceaga Castro

Dr. Víctor Manuel Jiménez Mondragón

Dr. Felipe de Jesús González Montañez

Dr. Irvin López Ga

29 de enero del 2025.

Dr. Juan Carlos Olivares Galván
Coordinador de la Maestría en Ciencias en Ing. Electromagnética
División de Ciencias Básica e Ingeniería
UAM Azcapotzalco
Presente

Por este medio le expreso mi aceptación a participar activamente en el Comité de Estudios de la Maestría en Ciencias en Ingeniería Electromagnética, si la invitación que usted me ha realizado es de la consideración del Dr. Rafael Escarela Perez y del Consejo Divisional que ella preside.

Así mismo, le comento que estoy enterado del contenido de los Lineamientos del Consejo Divisional de Ciencias Básicas e Ingeniería para el desarrollo y operación de los posgrados, vigentes a la fecha.

Atentamente

A solid black rectangular box used to redact the signature of the sender.

Dra. Irma Irasema Siller Alcalá

Departamento de Electrónica

CURRICULUM VITAE

ESCOLARIDAD

- LICENCIATURA: Universidad Autónoma de Nuevo León.
Licenciatura en Física.
- MAESTRIA: CINVESTAV-IPN, México, D. F.
Maestría en Ciencias en la especialidad de
Ingeniería Eléctrica
- DOCTORADO: University of Glasgow,
Department of Mechanical Engineering
Centre for Systems & Control
Scotland, U. K.
PhD en Ingeniería Mecánica Especialidad en
Control. 1998
Tesis "Nonlinear Continuous-time Generalised
Predictive Control".

DISTINCIONES

- En 1999, The Institution of Electrical Engineers (IEE) otorgó el Premio F C Williams Premium en **Londres, Inglaterra** (1er lugar del período Oct. 1997 a Sept. 1998) por el mejor artículo durante este periodo **Multivariable Continuous time Generalised Predictive Control: State Space Approach to linear and nonlinear Systems publicado en IEE (Actualmente IET) Proceedings Control Theory and Applications 1998.**
- En 2011 Mejor artículo en la Conferencia the Applied Computing Conference 2011 (ACC '11) **Speed Nonlinear Predictive Control of a Series DC Motor for Bidirectional Operation, Angers, Francia, Noviembre, 2011.**

PUBLICACIONES

PUBLICACIONES EN REVISTAS

- “Using a Flywheel to Stabilize a Self-Balancing Bicycle” WSEAS Transaction on Systems and Control Vol. 18 2024 I.I. Siller Alcalá, J.U. Liceaga Castro, R. Alcántara Ramírez, S. Calzadilla-Ayala.
- “Modeling and Control of a DC-DC Buck–Boost Converter with Non-Linear Power Inductor Operating in Saturation Region Considering Electrical Losses” Mathematics 2023, 11, 4617. <https://doi.org/10.3390/math11224617> <https://www.mdpi.com/journal/mathematics>, Ernesto Molina-Santana, Felipe Gonzalez-Montañez, Jesus Ulises Liceaga-Castro, Victor Manuel Jimenez-Mondragon 2 and Irma Siller-Alcala
- “Pi speed control with reverse motion of a series dc motor based on the noise reduction disturbance observer” Actuators, 2022, I.I. Siller Alcalá , J.U. Liceaga Castro , J.D González San Roman , R. Alcántara Ramírez,
- “Speed ripple and dead zone effects reduction in an 8/6 switched reluctance motor based on classical control strategies” WSEAS TRANSACTIONS ON COMPUTERS, 2021, I.I. Siller Alcalá , J.U. Liceaga Castro , J.D González San Roman , R. Alcántara Ramírez,
- “Comparative study between classical controllers and inverse dead zone control for position control of a permanent magnet dc motor with dead zone” WSEAS TRANSACTIONS ON POWER SYSTEMS, 2020, I. I. Siller-Alcalá, J. U. Liceaga-Castro, A. Pérez Gómez.
- “Noise reduction disturbance observer global stability and robustness conditions based on the nyquist stability criteria” INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH AND DEVELOPMENT, 2020, I.I.Siller-Alcalá, J. U. Liceaga-Castro,
- “Hard dead zone and friction modeling and identification of a permanent magnet dc motor nonlinear model” WSEAS TRANSACTIONS ON SYSTEMS AND CONTROL, 2020, I. I. Siller-Alcalá, J. U. Liceaga-Castro, A. Pérez Gómez
- “Least square identification using noise reduction disturbance observer” WSEAS TRANSACTIONS ON SYSTEMS, 2019, I.I. Siller-Alcalá, J. U. Liceaga-Castro, R.A. Alcántara-Ramírez.
- “Continuous time generalized predictive control from a classical control perspective”, WSEAS TRANSACTIONS ON SYSTEMS AND CONTROL, 2018, I. I. Siller-Alcalá, J. U. Liceaga-Castro
- “Identification and Real Time Speed Control of Series DC Motors” Mathematical Problems in Engineering. 2017. I. I. Siller-Alcalá, J. U. Liceaga-Castro, R. A. Alcántara-Ramírez, J. M. Jaimes-Ponce.
- “Identification of Series DC Motors Based on the Strecj Method” International Journal of Systems Applications, Engineering & Development. 2017. I.I. Siller-Alcalá, J. U. Liceaga-Castro, R. A. Alcántara-Ramírez, J. M. Jaimes-Ponce.
- “Nonlinear Control of a Single-Link Flexible Joint Manipulator via Predictive Control”. WSEAS TRANSACTIONS on SYSTEMS and CONTROL. 2016. I. I. Siller-Alcalá, M. Jaimes-Ponce, Jesús U. Liceaga-Castro y Roberto A. Alcántara-Ramírez.
- “Experimental Platforms based LabVIEW for teaching Electronics Engineering Courses” J. M. Jaimes-Ponce, J. U. Liceaga-Castro, I. I. Siller-Alcalá and, R. A. Alcántara-Ramírez. INTERNATIONAL JOURNAL OF CIRCUITS, SYSTEMS AND SIGNAL PROCESSING Volume 10, 2016. ISSN: 1998-4464.
- “Multivariable Control of a Metrology Laboratory: Humidity and Temperature Regulation” INTERNATIONAL JOURNAL OF CIRCUITS, SYSTEMS AND SIGNAL PROCESSING, Jorge M. Jaimes-Ponce, Jesús U. Liceaga-Castro, I. I. Siller-Alcalá. and Roberto A. Alcántara- Ramírez. 2016

- “MIMO Passive Control Systems Are Not Necessarily Robust.” Journal of Control Science and Engineering, USA, 2015 Liceaga-Castro, I.I. Siller Alcalá
- “A Case of Study for Classical Control Theory Courses Using Information and Communication Technologies”, J.U. Liceaga-Castro, I.I. Siller Alcalá, J. Jaimes-Ponce, A. Ferreyra-Ramírez and R. Alcántara-Ramírez.. The International Journal of Circuits, Systems and Signal Processing, 2013. , 2015.
- "Electrical Conductivity and Water Flow Control of Nutrients in a NFT System" .J. Jaimes- Ponce, J.U. Liceaga-Castro, R. Alcántara-Ramírez and I.I. Siller Alcalá. The International Journal of Education and Information Technologies, 2013.
- “Information and Communication Technologies Applications in Control Theory Courses. Case of study: Speed Control” International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), Montreux, Suiza, 2012. J. U. Liceaga-Castro, I. I. Siller- Alcalá, J. Jaimes-Ponce, R. Alcántara-Ramírez and A. Ferreyra-Ramírez
- “Hardware-Software System for laboratory experimentation in electronic circuit” International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012. J. Jaimes-Ponce, R. Alcántara-Ramírez J. , I. I. Siller-Alcalá and J. Sandoval-Gutiérrez
- “Geometric method for orthogonal orientation in moving heads”, International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012. J. Sandoval-Gutiérrez, I. I. Siller-Alcalá, J. Jaimes-Ponce and A. Ferreyra-Ramírez
- “Control of Nutrients in a System NFT in Production of Spinach Based on Control of Electrical Conductivity and Water Flow”, International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012. J. Jaimes-Ponce, R. Jesús U. Liceaga-Castro, R. Alcántara-Ramírez J. and I. I. Siller-Alcalá
- “Phase and Gain Margins for MIMO Linear Control Systems” IEEE and CSS (Control System Society) ICSTCC-2012 (International Congress on System Technology, Control and Computing) **Sinaia, Rumanía**, Octubre 2012, Jesús U. Liceaga-Castro, E. Liceaga-Castro and Irma I. Siller Alcalá
- “Modelling and Simulation of a Four Phases Variable Reluctance Motor”. IEEE and CSS (Control System Society) ICSTCC-2012 (International Congress on System Technology, Control and Computing) **Sinaia, Rumanía**, Octubre 2012. Liceaga Castro J., G. Núñez Castro, Liceaga Castro E., Irma I. Siller Alcalá and A. Ferreyra-Ramírez
- “Speed Nonlinear Predictive Control of a Series DC Motor for Bidirectional Operation.” Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. CIUDAD: Angers. A PAG. INICIAL: 182. PAG. FINAL: 188. **Angers, Francia**, Noviembre, 2011. ISBN: 978-1-61804-051-0 Autores: I.I. Siller Alcalá, J. U. Liceaga-Castro, A. Ferreyra-Ramirez, R. Alcanta-Ramírez, J. Jaimes-Ponce
- “Interactive Scenario Development”. Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. PAG. INICIAL: 35. PAG. FINAL: 39. **Angers, Francia**. Noviembre 2011. David G. Maxinez, M. A. Garcia- Galvan, F. J. Sanchez-Rangel, E. Chavez-Cuayahuitl, E. A. Gonzalez , R. Rodriguez-Bautista, A. Ferreyra-Ramirez, C. Aviles-Cruz, I. I. Siller Alcalá.
- “An Inverse Model of Magnetorheological Dampers with Optimal Neural Network Architecture”

Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. PAG. INICIAL: 200. PAG. FINAL: 206. **Angers, Francia**. Noviembre 2011. ISBN: 978-1-61804-051-0 AUTORES: J. C. Olguin-Rojas, A. Ferreyra-Ramirez, J. Sandoval-Gutiérrez

- “Control of Nutrients in a System NFT in Production of Spinach, Based on Control of Electrical Conductivity and Flow” 2nd ICAS - International Congress on Instrumentation and Applied Sciences. PAG. INICIAL: 1. PAG. FINAL: 12. Puebla, México 2011, I.I. Siller Alcalá, Jorge M. Jaimes Ponce, Efrén Pérez Gil, Roberto A. Alcántara Ramírez , Jorge López Ortega
- “Some properties of Nonlinear Continuous Time Generalized Predictive Control” 12th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering, **Algarve, Portugal**, Nov. 2010 I. I. Siller Alcalá, A. Ferreyra Ramírez, R. Alcántara Ramírez y J. Jaimes Ponce
- “Model Based Predictive Control for a Class of Maximum Phase nonlinear SISO Systems” 12th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering, **Algarve, Portugal**, Nov. 2010 I. I. Siller Alcalá, A. Ferreyra Ramírez, R. Alcántara Ramírez y J. Jaimes Ponce
- “Design, construction and control of a novel tower crane”, José de Jesús Rubio, Jaime Pacheco, Roberto Alcántara, Jorge Jaimes, Irma Siller. The Masterbuilder, Cap. Tower Crane Today. Vol.11. No. 6, pags. 39- 46., 2009.

PUBLICACIONES EN MEMORIAS INTERNACIONALES

- “Series DC Motor Modeling and Identification” Proceedings of the ICCAIRO-2017 Congress, 2017. I.I. Siller-Alcalá, J. U. Liceaga-Castro, R. A. Alcántara-Ramírez, J. M. Jaimes-Ponce.
- “Nonlinear Control of a Single-Link Flexible Joint Manipulator via Predictive Control”. 15th International Conference on Non-Linear Analysis, Non-Linear Systems and Chaos NOLASC"16. 2016. I. I. Siller-Alcalá, M. Jaimes-Ponce, Jesús U. Liceaga-Castro y Roberto A. Alcántara-Ramírez.
- “Electronic Speed Variator for a Brushless DC Motor” CSCC15 Proceedings. **Zathinkos, Grecia**. J. Liceaga-Castro, I.I. Siller Alcalá, J. Jaimes-Ponce, and R. Alcántara-Ramírez, 2015.
- “Humidity and Temperature Control of a Metrology Laboratory” CSCC15 Proceedings. **Zathinkos, Grecia**. J. Liceaga-Castro, I.I. Siller Alcalá, J. Jaimes-Ponce, and R. Alcántara-Ramírez, 2015.
- “Graphical Programming for Control and Instrumentation Curses” CSCC15 Proceedings. **Zathinkos, Grecia**. J. Liceaga-Castro, I.I. Siller Alcalá, J. Jaimes-Ponce, and R. Alcántara-Ramírez, 2015.
- “CONTROL GUIDANCE OF A FLUID CONTAINER WITH TWO DEGREE OF FREEDOM ROBOT” 22th International Congress on sound and Vibration, **Florenzia, Italia** Benjamín Vázquez, J.U. Liceaga-Castro, I.I. Siller Alcalá, 2015.
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- “Phase and Gain Margins for MIMO Linear Control Systems”. Liceaga Castro J., Liceaga Castro E. Irma I. Siller Alcalá. IEEE and CSS (Control System Society) ICSTCC-2012 (International Congress on System Technology, Control and Computing) **Sinaia, Rumanía**, Octubre 2012.
- “Modelling and Simulation of a Four Phases Variable Reluctance Motor”. Liceaga Castro J., G. Núñez Catro, Liceaga Castro E. Irma I. Siller Alcalá and A. Ferreyra-Ramírez. IEEE and CSS (Control System Society) ICSTCC-2012 (International Congress on System Technology, Control

and Computing) **Sinaia, Rumanía**, Octubre 2012.

- “Information and Communication Technologies Applications in Control Theory Courses. Case of study: Speed Control”, J. U. LICEAGA-CASTRO, I. I. SILLER-ALCALÁ, J. JAIMES-PONCE, R. ALCÁNTARA-RAMÍREZ AND A. FERREYRA-RAMÍREZ, International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012.
- “Geometric method for orthogonal orientation in moving heads”, J. SÁNDOVAL-GUTIÉRREZ, I. I. SILLER-ALCALÁ, A. FERREYRA-RAMÍREZ AND J. JAIMES-PONCE, International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012.
- “Control of Nutrients in a System NFT in Production of Spinach Based on Control of Electrical Conductivity and Water Flow”, J. JAIMES-PONCE, J. U. LICEAGA-CASTRO, R. ALCÁNTARA-RAMÍREZ AND I. I. SILLER-ALCALÁ. International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012.
- “Hardware-Software System for laboratory experimentation in electronic circuit”, J. JAIMES-PONCE, I. I. SILLER-ALCALÁ, R. ALCÁNTARA-RAMÍREZ AND J. SÁNDOVAL-GUTIÉRREZ, International Conference on Circuits, Systems, Electronics, Control & Signal Processing (CSECS '12), **Montreux, Suiza**, 2012.
- “Speed Nonlinear Predictive Control of a Series DC Motor for Bidirectional Operation.” I.I. Siller Alcalá, J. U. Liceaga-Castro, A. Ferreyra-Ramirez, R. Alcanta-Ramírez, J. Jaimes-Ponce Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. **Angers, Francia**, Noviembre, 2011.
- “Interactive Scenario Development”. David G. Maxinez, M. A. Garcia- Galvan, F. J. Sanchez-Rangel, E. Chavez-Cuayahuitl, E. A. Gonzalez , R. Rodriguez-Bautista, A. Ferreyra-Ramirez, C. Aviles-Cruz, I. I. Siller Alcalá. Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. **Angers, Francia**. Noviembre 2011.
- “An Inverse Model of Magnetorheological Dampers with Optimal Neural Network Architecture” J. C. Olguin-Rojas, I.I.Siller-Alcalá, A. Ferreyra-Ramirez, J. Sandoval-Gutierrez Recent Researches in Mathematical Methods in Electrical Engineering & Computer Science. **Angers, Francia**. Noviembre 2011.
- “Model Based Predictive Control for a Class of Maximum Phase Nonlinear SISO Systems”, I. I. Siller-Alcalá, A. Ferreyra-Ramírez,, R. Alcántara-Ramírez, J. Jaimes-Ponce, Advances in Mathematical Computational Methods, pags. 297-302, **Faro, Portugal**, 2010.
- “Some Properties of Nonlinear Continuous Time generalized Predictive Control”, I. I. Siller-Alcalá, A. Ferreyra-Ramírez,, R. Alcántara-Ramírez, J. Jaimes-Ponce, Advances in Mathematical Computational Methods, pags. 291-296, **Faro, Portugal**, 2010.
- “Position predictive control for an induction motor”. Irma I. Siller Alcalá, Abderrahim Fichouche Mohamed, Jaimes Ponce Jorge, Alcántara Ramírez Roberto, The 3rd WSEAS/IASME International conference on dynamical systems and control , **Arcachon, Francia, 2007**.
- “Design of the electronic control system of an articulated robot arm”, Rubio Ávila José, Alcántara Ramírez Roberto, Jaimes Ponce Jorge, Irma I. Siller Alcalá, The 3rd WSEAS/IASME international conference on educational technologies, **Arcachon, Francia**, 2007.
- “Practices in real time and simulation for learning control theory”, Irma I. Siller Alcalá, Alcántara Ramírez Roberto, Jaimes Ponce Jorge, Vaca Pliego Juan Pablo, The 3rd WSEAS/IASME international conference on educational technologies, **Arcachon, Francia**, 2007.