

Vicente Alejandro Castro Henríquez

Email: vicente.castro@sansano.usm.cl

Birth date: 12/07/1996

EDUCATION

Universidad Técnica Federico Santa María (UTFSM)	Valparaíso, Chile
MSc in Industrial Engineering	2020 - 2023
BSc in Industrial Engineering	2016 - 2020

EXPERIENCE

Undergraduate Teaching Assistant	UTFSM
<i>QUI010 - Química y Sociedad - Departamento de Química</i>	2017 - 2019

- Courses related to introductory chemistry concepts. Lecture sessions were conducted.

Undergraduate Teaching Assistant	UTFSM
<i>IWM210 - Termodinámica General y Laboratorio - Departamento de Mecánica</i>	2019

- Courses related to thermodynamics. Lecture sessions were conducted.

<i>ILN222 - Gestión Energética 2 - Departamento de Industrias / Energy Conversion and Combustion Group</i>	UTFSM
	2019 - present

- Course related to heat transfer. Lecture and laboratory sessions were conducted.

Undergraduate Teaching Assistant	UTFSM
<i>ILN250 - Gestión de investigación de Operaciones - Departamento de Industrias</i>	2021

- Course related to introduction to linear optimization. Lecture sessions were conducted.

PARTICIPATION IN PROJECTS

Programa de Cooperación Internacional (PCI) NSFC 190009	2020 - present
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- Project name: Revealing Soot Chemistry Evolution in the Combustion of Biofuels for Jet Applications.
- Participated as MSc student developing my Thesis.
- Main duties were to perform experimental measurements in laminar flames based on line on sight attenuation and laser techniques

Academic Consultant - COPEC S.A.	2022
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- The main duties were to carry out experimental measurements to evaluate the performance of different additives in the fuel.

2nd Asian Pacific Combustion Institute Summer School (APCISS)	2022
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- Support on the organization of the second Asia-Pacific Combustion Institute Summer School (APCISS) at the UTFSM.

PUBLICATIONS

IN CONFERENCES

- Dynamic range gate of TiRe-LII measurements for soot temperature.
Authors: V. Castro, N. Gutiérrez, J.J. Cruz, R. Demarco, M. Littin, F. Escudero, J. Yon, F. Liu and A. Fuentes
Conference: *Mediterranean Combustion Symposium 12*
- Anisole maturity characterization in a laminar coflow diffusion flame.
Authors: C. Barrera, V. Castro, F. Escudero, J.J. Cruz, I. Verdugo, J. Yon and A. Fuentes
Conference: *Mediterranean Combustion Symposium 12*
- Soot temperature measurements in a laminar flame by a commercial digital three color camera.
Authors: V. Castro, J.J. Cruz, I. Verdugo and A. Fuentes
Conference: *8th Brazilian Combustion Institute Summer School of Combustion - Poster session*

- Dynamic range gate of TiRe-LII measurements for soot temperature.

Authors: *V. Castro, N. Gutiérrez, J.J. Cruz, R. Demarco, M. Littin, F. Escudero, J. Yon, F. Liu and A. Fuentes*

Journal: *Fuel (Special Issue MCS12)*

- Anisole maturity characterization in a laminar coflow diffusion flame.

Authors: *C. Barrera, V. Castro, F. Escudero, J.J. Cruz, I. Verdugo, J. Yon and A. Fuentes*

Journal: *Experimental Thermal Fluid Science (Special Issue MCS12)*

TECHNICAL SKILLS

Programming:

- Main used regularly: Python , L^AT_EX.
- Main used intermittently: MATLAB, AMPL and MySQL.

Software and others: RETScreen Clean Energy Management Software, Autodesk Autocad, Autodesk Inventor, Blender, Adobe Illustrator.

Languages: Spanish (Native), English (High Intermediate).