

# ICRAMCS 2026

THE EIGHTH EDITION OF THE INTERNATIONAL CONFERENCE ON  
RESEARCH IN APPLIED MATHEMATICS AND COMPUTER SCIENCE

April 23-24-25, 2026 | Marrakech, Morocco



## On a Class of Schrödinger System Problem in Orlicz–Sobolev Spaces

### Communication Info

#### Authors:

M. Kerdani  
H. El-Houari  
H. Moussa

Université Sultan Moulay  
Slimane, Faculté des Sciences et  
Techniques Béni Mellal, Beni  
Mellal, Morocco

#### Keywords:

- (1) Quasi-linear Schrödinger system
- (2) Orlicz–Sobolev spaces
- (3)  $\omega(\cdot)$ -Laplacian operator
- (4) Mountain pass theorem
- (5) Weak solution

### Abstract

This paper studies the existence of solutions for a class of quasi-linear Schrödinger systems in the framework of Orlicz–Sobolev spaces. The authors M. Kerdani, H. El-Houari, and H. Moussa, consider a coupled system driven by the generalized  $\omega(\cdot)$ -Laplacian operator. After developing the functional setting and recalling key properties of Orlicz and Orlicz–Sobolev spaces, they introduce suitable assumptions on the nonlinear terms and potentials. Using variational methods—especially the mountain pass theorem—they prove the existence of at least one nontrivial, nonnegative weak solution to the system.

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