Proposal Acronym	JADRANSERS
Proposal Title:	Environmental aquaculture and seafood monitoring in South-Adriatic coast (Croatia) using Raman spectroscopy techniques and SERS-based sensors
Surname:	Pinzaru
First name(s):	Simona
Research area:	Chemistry CHE
Sub-discipline of research area:	Multidisciplinary Spectroscopic andf spectrometric methods, Physical Chemistry of Biological systems Aquaculture-fishery Food Chemistry Environmental toxicology
Category of research:	applied
[redacted]	[redacted]
Abstract:	The project jointly combines the expertise in applied Raman spectroscopy techniques, particularly surface enhanced Raman scattering (SERS) in biomedical and environmental field of the applicant with the aquaculture expertise of the Croatian person in charge from the host institution, aiming to implement new plasmonics-based SERS sensing methods to answer to the current needs for ultrasensitive, fast, cheap and non-invasive aquaculture monitoring on the Croatian sea coast. In situ SERS investigation will be achieved for simultaneously monitoring of anions content, microorganisms and contaminants in seawater. SERS of fish and shellfish tissue will be applied for the first time, aiming to detect and monitor the paralytic-, amnesic- or diarrhea shellfish poisoning (PSP, ASP, DSP) species respectively. In situ SERS assessment using portable Raman technology will focus on aquaculture monitoring, taking into account the local environmental conditions and the EU regulation requirements.
Does this proposal possess any of the sensitive ethical issues detailed in ethical issues table?:	Yes