

ECOLOGICAL UNIVERSITY OF BUCHAREST

Doctoral Studies Organizing Institution (IOSUD)

– *Doctoral School of Law* –

SUMMARY OF THE HABILITATION THESIS

Environmental Law Facing the Challenges of Constitutionalization, Climate Change and the Impact of Artificial Intelligence (AI)

Field of the habilitation thesis: **LAW**

Candidate:

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Bucharest, 2026

I. Academic, Professional and Scientific Achievements

The main object of my preoccupations has been, and continues to be, *environmental law*, understood as a branch of law and a scientific discipline characterised by complexity, transversality and interdisciplinarity. Indeed, *environmental protection* implies a complex legal response expressed, on the one hand, through the development of specific dimensions of the traditional branches of law [constitutional environmental law, private (civil) environmental law, criminal environmental law, etc.], and on the other hand through the constitution of an autonomous normative system, dominated by specific general principles and by the fundamental right to environment, structured at the level of the three main legal orders [national (Romanian) environmental law, European – EU environmental law, and international environmental law]. Adopting such an approach, and by virtue of the specificity of the field, I have also taken into account the transversality of regulation and of its content (ecological issues permeating, to varying degrees and in different forms, the entire normative and political-social system) and, not least, the interdisciplinarity and transdisciplinarity, including that pertaining to the hard sciences, which contribute to determining the technical-legal content of environmental law (ecology, technical sciences, new technologies).

1. Academic-Professional Achievements

The first chapter of Part I of the thesis presents the development of the teaching activity, begun within the Faculty of Law of the Ecological University of Bucharest (2008) and pursued to this day, and from 2014 as a tenured member of the Department of Law of the Faculty of Administrative Sciences within SNSPA, in the context of a professional path consolidated gradually, up to the rank of associate professor.

1.1. In the activity carried out as a university teaching staff member, the inter-disciplinary perspective of the *environmental law* research field manifests itself through the very diversity of the subjects taught: environmental law and related fields (sustainable development and environmental protection, urban planning law, etc.); private environmental law (civil law and derivative subjects, studied within the Faculty of Public Administration), and, respectively, European Union law from the same perspective (European litigation, including environmental litigation). Given the profiles of the faculties and the nature of the disciplines, which require detailed knowledge of both several branches of law and other related fields of scientific knowledge, from the outset I have proposed to students a transdisciplinary approach to the issues specific to the subjects studied, with environmental protection as the unifying thread, from the perspective of the practical applicability of the knowledge acquired across different subjects and of its concrete utility.

At the same time, I have also put forward a perspective specific to the general specialisations – the legal sciences, respectively public administration and its complement, public environmental action – by emphasising the specific legal relations and the role played by the respective branch of law within the context of socio-economic reality, whether public or private in nature. Particular attention has been paid to presenting the areas of intersection between administrative law and environmental law (which largely have such a nature) and the specific differences, the administrative regime of protection, administrative environmental acts, administrative environmental litigation, etc.

1.2. In 2013 I obtained the **title of doctor of law** with a thesis entitled *Conceptul de patrimoniu în Dreptul civil și în Dreptul mediului* [The Concept of Patrimony in Civil Law and Environmental Law], defended within the Institute for Legal Research of the Romanian Academy (supervisor: Prof. univ. dr. CP I Marilena Uliescu). The work was published the same year by Universul Juridic Publishing House, revised and supplemented accordingly, in the form

of a monograph entitled *Patrimoniul în dreptul civil și în dreptul mediului* [Patrimony in Civil Law and Environmental Law].

Concurrently with my teaching career, I undertook significant scientific research activities, materialised in **more than 55 articles and scientific studies**, published in journals recognised at national and international level, alongside **12 specialised volumes**, of which **4 university courses, 4 monographs (2 co-authored and 2 as sole author) and one treatise** relating to the disciplines taught¹. In parallel, I have participated in numerous conferences and scientific communication sessions dedicated to my research fields, being a member of the European scientific research networks "Natura 2000" (since 2009) and "Water Framework Directive" (since 2009), of the International Association of Urban Planning Law [Association internationale du droit de l'urbanisme (AIDRU) – Université Paris I – GRIDAUH] (since 2011) and of the *International Centre for Comparative Environmental Law* (CIDCE, Limoges, France). Activity within these structures takes place through periodic meetings, generally biennial, in which *national reports* on a given topic are presented and subsequently published as volumes by prestigious international legal publishers, scientific research is carried out and specialised works are issued. A central place in scientific research activity is occupied by the organisation of and participation in the international colloquia on environmental law in Bucharest, held annually (first edition in 2024), organised by UEB and CIDCE and whose proceedings are published by prestigious French publishers.

Thus, the first edition (May 2024) had as its theme *Dreptul uman la mediu și Pactul verde* [The Human Right to Environment and the Green Deal] (with the volume "Droit humain à l'environnement et Pacte Vert. Les apports du pacte vert à la reconnaissance d'un droit humain à l'environnement en Europe et dans le monde", Mare & Martin, Paris, 2025); the second (May 2025), *Consacrarea universală a dreptului uman la mediu* [The Universal Consecration of the Human Right to Environment] (with the volume "La consécration universelle du droit de l'homme à l'environnement", Mare & Martin, Paris, forthcoming); and the 3rd edition has as its theme *Efectivitatea dreptului internațional și comparat al mediului și indicatorii juridici* [[The Effectivity of International and Comparative Environmental Law, and Juridical Indicators] (15–17 June 2026).

Through participation in scientific events organised under the aegis of the "Acad. Andrei Rădulescu" Institute for Legal Research of the Romanian Academy, of the faculties in which I work as a teaching staff member, of the Union of Jurists of Romania, and of specialised international structures, I have always pursued primarily their multidisciplinary and interdisciplinary character, as well as the development of specific areas, namely the constitutionalisation and fundamentalisation of environmental rights (environmental rights, general principles), climate law and the impact of AI on environmental protection.

I have also engaged with legal publishing from another perspective, as editor-in-chief of the journal *International Law Review*, member of the scientific council of the journal *Dreptul* [The Law], both edited under the aegis of the Union of Jurists of Romania, and as a member of the Editorial Board of the journal "Pandectele Române" [The Romanian Pandects].

¹E.g.: *Tratat de dreptul mediului* [Treatise on Environmental Law] (Universul Juridic Publishing House, 2026); *Dreptul mediului. Curs universitar* [Environmental Law. University Course] (co-author, C.H. Beck Publishing House, 2016); *Dreptul de proprietate și exigențele protecției mediului* [The Right of Property and the Requirements of Environmental Protection] (co-author, Universul Juridic Publishing House, 2011); *Răspunderea în dreptul mediului* [Liability in Environmental Law] (co-author, Romanian Academy Publishing House, 2015); *Principiile generale ale dreptului mediului* [The General Principles of Environmental Law] (Universul Juridic Publishing House, 2026).

The works I have published have been **cited** by Romanian and foreign authors (Google Scholar record) more than **90 times**, in accordance with Order no. 6129 of 20 December 2016.

2. Scientific Achievements in the Main Research Field – Environmental Law

The **main field** in which I carry out my teaching and scientific research activity is *environmental law* and its related sectors (private environmental law, climate law, sustainable development law, AI law) – research areas from which I likewise drew the subject of my doctoral thesis, devoted to the analysis of the concept of patrimony in civil law and environmental law. Subsequently, I channelled my teaching and research activity along the following priority directions, marked by relevant contributions, openness to innovation and broad perspectives: the study and research of the challenges generated by constitutionalisation, climate change and the impact of AI for the development of environmental law.

Throughout my entire teaching activity, I have participated in the research projects of the relevant university structures (SNSPA and UEB), as well as in those organised by the "Acad. Andrei Rădulescu" Institute for Legal Research of the Romanian Academy, with which I have developed a fruitful collaboration in the continuation and development of doctoral and post-doctoral training. I have participated in the scientific communication sessions periodically organised by it, as well as in other relevant events, and in the research programme *Studii doctorale și postdoctorale Orizont 2020: promovarea interesului național prin excelență, competitivitate și responsabilitate în cercetarea științifică fundamentală și aplicată românească* [Doctoral and Postdoctoral Studies Horizon 2020: Promoting the National Interest Through Excellence, Competitiveness and Responsibility in Romanian Fundamental and Applied Scientific Research] (POSDRU/159/1.5/S/140106); the CORE Project (EUAF Project no. 101256867) – Custom Operation for Risk Evaluation (2026–2028); the POS-Mediu Project SMIS – CSNR 36264 – Management Plan for Natura 2000 Sites ROSCI 0103 – ROSCI 0191, 2012–2013; the TDEC Project – Digital and Eco-Climate Transition (code 188293546) (2024–2026); and a Research Fellowship at Louvain Global College of Law – UCLouvain (2025–2026).

In this regard, I consider as a priority preoccupation and pioneering contribution in Romania the new approach having as its fundamental axis formal constitutionalisation, theoretical fundamentalisation and connection to the ecological and digital transition. This approach has made it possible to elaborate a particular vision of the current stage of development of environmental law – that of normative maturation and defining conceptualisation – with real and major prospects for evolution.

3. Main and Priority Directions of Teaching-Scientific Activity

3.1. The first direction of scientific preoccupation has concerned, pursues, and will continue to focus on the *constitutionalisation and fundamentalisation* of environmental law, as two complementary processes that decisively mark the field and mutually reinforce one another. Both tend to promote *environmental protection*, placing it at the apex of the legal hierarchy (rights, duties, principles) and, respectively, at the centre of fundamental rights and of the development of the right to a healthy environment, a pillar of the structuring of the norms and principles of the field².

²*Droit humain à l'environnement et Pacte Vert* [The Human Right to the Environment and the Green Deal], in the volume "Droit humain à l'environnement et Pacte Vert. Les apports du pacte vert à la reconnaissance d'un droit humain à l'environnement en Europe et dans le monde", Mare & Martin, Paris, 2025; *Droits de l'homme à l'environnement et Union européenne* [Human Rights to the

The first, as a formal and hierarchical approach, seeks the direct and explicit inscription of environmental law in constitutional texts; the second, as a substantive and axiological one, seeks the elevation and affirmation of its general principles and of the environmental right(s) to the rank of fundamental rights, in the fullness of their meanings.

From such a perspective, the conceptualisation and fundamentalisation of environmental law – through the establishment of the constitutional and principial (principles-based) basis and the configuration of the system of the right to a healthy environment – to which are added, within contextual approaches, as novel aspects of development and broad future perspective, climate change and the impact of artificial intelligence, represent the defining element of the development of my teaching and scientific research career. This work is circumscribed to three main thematic directions, to which I have given due priority.

3.2. Within the same perspective of approach and of permanent connection to the latest trends of normative evolution and legal reflection in the matter, the second direction of scientific preoccupation refers to the analysis of *the relationship between environmental law and climate change*, a new global ecological challenge, in a threefold posture: as an instrument for combating the phenomenon, as a specific mechanism of responsibility, and as a lever for the protection of human rights against eco-climate threats. The objectives assumed and the resulting contributions were circumscribed to the normative reaction (which led to the creation of climate law as a new, autonomous dimension of environmental law), the impact on human rights and the prefiguration of the right to a stable climate (within the system of environmental rights), the concept and practices of climate justice and the related responsibility, as well as environmental litigation and its role in generating relevant case-law³.

3.3. A third priority research direction – the most recent, but particularly promising for the future – is the impact of new technologies in general, and of AI in particular, on the (protection of the) environment, from the perspective of the law applicable thereto. Given the

Environment and the European Union], in the volume “La consécration universelle du droit de l’homme à l’environnement” (eds. Michel Prieur, Andrei Duțu-Buzura), Mare & Martin, Paris, 2026; *The Contribution of Urban Planning Law to the Adaptation to Climate Change*, in the volume *Droit de l’urbanisme et changement climatique : défis et perspectives / Land Use Planning Law and Climate Change: Challenges and Perspectives – Flexibility in Urban Planning Law*, Proceedings of the XIVth AIDRU Colloquium – Bucharest, 20–21 September 2024, edited by Vera Parisio, Andrei Duțu-Buzura, Thierry Tanquerel; „*Constituționalizarea*” *climei și implicațiile sale asupra sistemului juridic. Cazul României* [The “Constitutionalization” of the Climate and Its Implications for the Legal System. The Case of Romania], in the volume *Dreptul și schimbările climatice* [Law and Climate Change] (ed.: Andrei Duțu-Buzura), Universul Juridic Publishing House, Bucharest, 2021, pp. 153–199; „*Constituționalizarea*” *climei și implicațiile sale asupra sistemului juridic. Cazul României* [The “Constitutionalization” of the Climate and Its Implications for the Legal System. The Case of Romania], in the journal “Dreptul” [The Law] no. 8/2021, pp. 74–103.

³ „*Pactul Verde*” – *strategie de creștere și cadrul de dezvoltare a unui drept UE al climei* [The “Green Deal” – Growth Strategy and the Framework for the Development of an EU Climate Law], in the volume *Dreptul și schimbările climatice* [Law and Climate Change] (ed.: Andrei Duțu-Buzura), Universul Juridic Publishing House, Bucharest, 2021, pp. 112–125; *Dreptul climei (al schimbărilor climatice). Contenciosul ca factor de progres juridic* [Climate Law (Climate Change Law). Litigation as a Factor of Legal Progress], in the journal “Studii și Cercetări Juridice” [Legal Studies and Research] no. 3/2018, pp. 151–174; „*Pactul verde pentru Europa*” și *provocările sale. Dimensiuni juridico-instituționale* [The “European Green Deal” and Its Challenges. Legal-Institutional Dimensions], in the journal “Studii și Cercetări Juridice” no. 2/2020, pp. 287–302; *Un aviz istoric al CIJ privind dreptul schimbărilor climatice* [A Historic Advisory Opinion of the ICJ on Climate Change Law], “Universul Juridic” no. 9/2025, pp. 84–95.

ambivalent effect of AI as a vector both for reducing and aggravating the ecological and carbon footprint, my preoccupations have primarily targeted the treatment of the issue within the AI Act [Regulation (EU) 2024/1689 of 13 June 2024], the affirmation of the concepts of ethical and sustainable AI and of the environmental sustainability of artificial intelligence, and the role of AI in environmental assessment and in the effectiveness and efficiency of environmental law⁴.

Around these three main directions of preoccupation is structured the entire teaching-scientific activity carried out and the main publications, marked by the novelty of the issues addressed, by original contributions, by the *de lege ferenda* proposals formulated, and by perspectives of continuation and future development. From this perspective, it should be noted that all three sub-fields addressed as priorities are in the vanguard of European and international developments in the matter and represent their reception, particularisation and affirmation in Romanian law; they express the current stage of development of the issue and open rich avenues for continuation and progress. Thus, *constitutionalism* and *constitutional law* of the environment represent a movement of ideas affirmed in the last two decades (post-2011 in the Anglo-Saxon area and from 2019 onwards in the French and European area); climate law has affirmed itself especially after 2015 (with the adoption of the Paris Agreement on climate); and the "AI law" of the environment is undergoing its very recent initiation and rapid affirmation [post-2024, with the adoption of the AI Act and the Council of Europe Framework Convention on AI (2024)].

Likewise, all three directions of professional-scientific development fall within the conception and vision of the author/candidate of environmental law as a branch of law and scientific discipline in full affirmation, with its own accelerated dynamics, with a transversal, interdisciplinary and integrative character on the plane of law as a system, and broadly open to the body of sciences as a whole. At the same time – and equally importantly – they contribute to defining the future stage of development of environmental law, that of the ecological and digital transition, which represents the future research project.

The entire scientific research and university training activity of the undersigned has been inscribed within, develops in the context of, and continues the action of the *Romanian School of Environmental Law*, initiated and affirmed within the Ecological University of Bucharest and the "Acad. Andrei Rădulescu" Institute for Legal Research of the Romanian Academy (through the professors and scientific researchers Mircea Duțu, Marilena Uliescu, Dumitra Popescu and Daniela Marinescu), and integrated into the international school of the field, particularly the Francophone one (represented by personalities such as Professors Michel Prieur, Alexandre Kiss and Jacqueline Morand-Deviller).

3.4. In the field of university training activity, I have contributed to promoting environmental issues as a specific complementary dimension of the Faculty of Law of UEB, present both within the great traditional disciplines and as a university excellence track – bachelor's, master's and doctoral – of environmental law, climate law and sustainable development law. Thus, for example, within the *civil law* courses and seminars, I have paid particular attention to integrating into the study programmes aspects relating to environmental protection, such as complementary notions/institutions like environmental goods and patrimony, the ecological function of the right of property, civil liability for ecological damage,

⁴*Considerații referitoare la impactul inteligenței artificiale asupra dreptului civil român* [Considerations on the Impact of Artificial Intelligence on Romanian Civil Law], in "Universul Juridic" no. 4/2025, pp. 33–64; *Impactul IA asupra mediului în cadrul AI Act* [The Impact of AI on the Environment Within the AI Act], in "Pandectele Române" [The Romanian Pandects] no. 4/2025, pp. 40–48.

etc.; within *urban planning law*, emphasis was placed on the environmental assessment of urban planning and territorial development plans and documentation, on sustainable urban development and on the adaptation of localities to climate change; the impact of new technologies and of AI on the environment formed the subject of the AI Environmental Law course within the AI Law master's programme, etc.

II. Proposals for the Continuation and Development of the Major Directions of Affirmation of Professional-Scientific Activity

On the basis of the results obtained – especially within the three main directions of teaching and research activity – of consolidating the perspectives opened and adding new ones, I propose addressing as a priority three themes of scientific-practical interest, particularly topical and, one might even say, of avant-garde importance: *environmental protection through law* as an element of European identity from the standpoint of the *European system of environmental rights*, *environmental sustainability of artificial intelligence*, and *the promotion and measurement of the effectiveness and efficiency of the general principles of environmental law*. These fall within the tradition of the Romanian School of Environmental Law, continue my own preoccupations in the field, and benefit from theoretical and institutional premises for effective realisation⁵.

In addition, they fall within the latest trends in the development of environmental law and its science, and may benefit from the substantial contribution of international cooperation in the field. Not least, the envisaged professional-scientific development approach lends itself to a productive conjugation of teaching with scientific investigation, both in terms of involving study in research and in terms of valorising and disseminating the results within the learning process.

Assuming such thematic perspectives of teaching-scientific development also implies orienting teaching activity towards the assimilation and dissemination of research results among students, including through their appropriate involvement. In this regard, I consider that the establishment of new forms and practices of preparation and participation – particularly of doctoral students – in the conduct of specialised scientific research should be put in place. From this point of view, and taking into account the specificity of the field, the following would, in my view, be of interest:

- the organisation of *idea labs and interdisciplinary research workshops* devoted to the conduct of support activities providing documentary backing to theoretical inquiry (sociological investigation of the state of environmental constitutionality, collection of empirical data for legal indicators, etc.);
- the experimentation of *technological procedures for the involvement of AI* in the documentation, systematisation and synthesis of legal-ecological information, including with the involvement of doctoral students – for example, the preparation of preliminary drafts of codification, namely an Environmental Code;

⁵Some of these were prefigured by works such as: *Spre un pact mondial (global) privind mediul* [Towards a World (Global) Pact for the Environment] (“Studii și Cercetări Juridice” no. 4/2018); *Necesitatea și dimensiunile unui Cod al mediului* [The Necessity and Dimensions of an Environmental Code] [“Revista română de dreptul mediului” / Romanian Environmental Law Review, no. 1(7)/2006]; *Drepturile Senei în contextul afirmării drepturilor Naturii și a noului drept al mediului* [The Rights of the Seine in the Context of the Affirmation of the Rights of Nature and of the New Environmental Law] (“Universul Juridic” no. 4/2026).

- within doctoral scientific research activity, the initiation of a project for the elaboration and presentation of a preliminary draft of an *Additional Protocol to the European Convention on Human Rights concerning Environmental Rights*, which would codify the rules of positive and customary international (European) law, the conclusions of the case-law of the ECHR, the common constitutional traditions of European states, the progress of EU law and that pertaining to the case-law of the CJEU, etc., and would systematically expound European environmental rights law. Elaborated on the basis of experience in the field and taking into account the European environmental acquis, the document would contribute to a systematic expression of European principles and rules for the protection of the environment and the conservation of the climate, in relation to human rights, and could be promoted for adoption within the Council of Europe;
- the analysis, development and consolidation in specialised doctrine of emerging concepts of broad theoretical vocation and practical resonance, with emphasis on theoretical particularities and operational implications, such as: global environmental law, the human right to a stable climate, environmental sustainability of AI, rights of nature, the right of humanity to a healthy environment and a stable climate system;
- a concrete project may concern the analysis of the extension to Romania of the international movement for granting legal personality and recognising proper rights to elements of nature. In a recent study (A. Duțu-Buzura, *Drepturile Senei în contextul afirmării drepturilor Naturii și a noului drept al mediului* [The Rights of the Seine in the Context of the Affirmation of the Rights of Nature and of the New Environmental Law], “Universul Juridic” no. 4/2026), I presented the new trends in this respect and the concrete case of the French legislative proposal concerning the rights of the Seine. Romanian law could respond in this direction, having in mind also the Spanish example in the matter (Mar Menor), in respect of the Dâmbovița river and the Danube Delta (especially in the context of remedying the negative consequences of recent events and of the impact of its conservation as part of the world natural heritage). Given that no constitutional provision opposes such an approach and considering the novelty of the matter, I consider that the elaboration and adoption of a special legislative project to that effect would be appropriate. With regard to the Danube Delta, such a proposal could be realised by amending and supplementing Law no. 82/1993 on the establishment and organisation of the "Danube Delta" Biosphere Reserve.
- the establishment of a curricular track – of training and research – of integrated environmental and climate law, by conjugating the bachelor’s, master’s and doctoral levels;
- the higher valorisation of scientific research results, through the elaboration of preliminary drafts of regulations, the codification of certain matters, the promotion of the combined approach of binding and voluntary norms, etc.;
- the continuation and intensification of international cooperation, within existing structures and through the establishment of new ones, and the encouragement of shared research and projects.

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The habilitation thesis in the field of *law*, with *environmental law* as the field of habilitation, synthetically highlights the personal contributions of a teaching and scientific nature in the matter of my professional preoccupations after obtaining the title of doctor of law

(2013), their current state and the perspectives of their continuation and development. I have chosen as defining fundamental themes, under the evocative title *Environmental Law Facing the Challenges of Constitutionalization, Climate Change and the Impact of AI* [*Dreptul mediului în fața provocărilor constituționalizării, schimbării climatice și a impactului IA*], the main trends of affirmation of environmental law as a branch of law and scientific discipline in recent decades: constitutionalisation (beginning post-1972 and reiterated from a climate perspective after 2015); climate change (legally perceived from 1992 onwards through the Framework Convention on Climate Change and transformed post-2015 – the moment of the adoption of the Paris Agreement, and in the last 7 years within the EU – into a predominant element of the field); and the impact of AI on the environment (the environmental sustainability of AI being regulated by the AI Act of 2024).

The dissemination of these issues within the teaching process (through specialised courses and seminars and relevant textbooks, headed by a Treatise) and especially within scientific research (with monographs, studies, research projects, conferences, and national and international colloquia) prefigures a personal contribution that is representative and substantial, integrated, and opens onto the entire matter and its theoretical-conceptual foundations.

The perspectives of continuation and development advanced here fall within the same vision of an integrated approach centred on socio-economic and scientific realities and on the priorities of environmental law: fundamentalisation and the affirmation of the European environmental identity; the effectiveness and efficiency of environmental law; and the environmental sustainability of new technologies (AI).

From a teaching standpoint, this falls within a university excellence track of environmental and climate law (at bachelor's, master's, doctoral and post-doctoral level); and from the standpoint of scientific research, it forms an integral part of the general activity of development and affirmation of this discipline in Romania.

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