

THE INTERNATIONAL LAW OF PEACE AND SECURITY

ARMS CONTROL LAW

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Arms Control Law

Edited by

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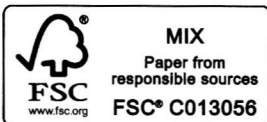
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Arms Control Law

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Series Preface

The essays collected in the four volumes of this reprint series, *The International Law of Peace and Security*, focus on a number of facets of international law concerned with peace and security. Clearly there are existing volumes in the Library of Essays on International Law (series editor Robert McCorquodale) that are essential reading for anyone interested in this area of international law, primarily *Collective Security Law*, edited by Nigel White, and *International Peacekeeping*, edited by Boris Kondoch. However, the aim of this series is not simply to develop and deepen the reader's understanding of international law in the area of peace and security, but to introduce new areas and concepts, namely the international laws that purport to govern and regulate arms control, counter-terrorism, the use of force, and peace-building. The focus will be on peace and security rather than on conflict, as the law of armed conflict has already been covered in the aforementioned series, in *Humanitarian Law* edited by Judith Gardam.

The international laws in the area of peace and security are essentially different from those that apply in conflicts – basically, the difference is between the law of peace and the law of war. Simply put, the law of war is concerned with regulating warfare – its means, methods, and issues of targeting and protecting persons – thereby upholding principles of humanity while recognizing the dictates of military necessity. The law of peace and security is about preventing conflicts and wars, and is increasingly concerned with rebuilding a situation of peace and security on the other side of the conflict following a ceasefire and peace agreement. Of course, it is not always possible to maintain a clear line between the *jus ad bellum*, *jus in bello* and *jus post bellum* – an issue raised by the controversial 'war on terror', but coming through more practically in specific instances such as the application of international humanitarian law to peacekeepers. In addition, the series only considers issues of international criminal justice when analysing the rebuilding of a post-conflict state or as an element of counter-terrorism, thus giving rise to little overlap with the collection in the aforementioned series, *The International Criminal Court* edited by Olympia Bekou and Robert Cryer.

The focus of these four volumes is essentially on the law of peace, more specifically those laws and legal regimes that underpin peace by means of controlling the spread of dangerous weapons and by limiting the occasions when states can use force on the international stage, or restoring it when that peace has been broken. In times of peace the main fear is of sudden attacks, possibly by the use of WMD or by terrorists, signifying that arms control law, the law regulating the use of force and anti-terrorist laws are all potentially applicable. In post-conflict situations, peace is being restored usually with the involvement of international actors, which raises a whole host of legal issues, including the applicability of human rights law within the unstable post-conflict state and the principles governing international intervention and involvement. The presence of the UN Security Council, as principal international guarantor and guardian of peace and security, in each of the four volumes is not only illustrative of the unifying theme of peace and security, but also raises concerns and issues about the central role of this most political of bodies in this area of law.

In considering the four volumes in this series individually, it can be seen that the volume edited by Dan Joyner – *Arms Control Law* – is a pretty unique collection of secondary sources collected from both legal and non-legal areas. The essays in this collection review and analyse the major arms control treaties and institutions including the Security Council. The contribution of arms control law to international peace and security is a key theme.

In *The Use of Force in International Law*, Tarcisio Gazzini and Nicholas Tsagourias have carefully selected essays from a vast range of literature to reflect the debates and controversies of this most fundamental, but much contested, area. The rules on when states and organizations can use or authorize the use of force is not only confined to the primary international treaty governing peace and security – the UN Charter – but also includes different viewpoints on controversial (customary) exceptions such as humanitarian intervention, as well as the more recent debates on the responsibility to protect. All this again requires attention to be given to the Security Council.

In *Counter-Terrorism and International Law*, Katja Samuel and Nigel White consider the problem of international terrorism (embodied in the struggle to define it) and the range of responses crafted by states and international organizations in order to try to respond to it, ranging from declaring ‘war’ to consensual cooperative criminal justice-type measures. The role of the Security Council in developing the legal regimes here, by use for example of targeted sanctions, is considered against the backdrop of existing conventions and practices. The contribution of these measures to the goals of peace and security embodied in the UN Charter is central to this collection.

Finally, *Post-Conflict Rebuilding and International Law*, edited by Ray Murphy, comprises an interesting collection of essays illustrating the phenomenon of rebuilding peace within different regions, followed by a consideration of the general normative framework including the arguments for and against recognizing (the need for) a *jus post bellum*. The essays review and analyse various types, stages and institutions involved in post-conflict peace-building from an international law perspective. They include discussion of rebuilding and peace operations (a much wider concept than peacekeeping operations), electoral support, humanitarian assistance and rule-of-law capacity-building. Post-conflict accountability mechanisms (amnesties, truth commissions, criminal tribunals) and their contribution to peace-building, as well as the wider restoration of peace and security, are also covered. Because this area is new and still developing there will be a need to identify the applicable principles of international law (for example, human rights including economic, social and cultural rights and the right of self-determination, but also the right to security), and the possible development of a *jus post bellum*, but Ray Murphy identifies a number of other challenges to this most difficult of tasks – rebuilding peace.

Each volume of collected essays is of immense value in itself, but each is also supplemented by an introduction by the volume editors and a selected bibliography, both of which add considerably to the usefulness of the collections to the reader.

NIGEL D. WHITE
Series Editor
University of Nottingham

Introduction

I was asked by Nigel White, the general editor of this series, to produce a volume entitled 'Arms Control Law'. Stipulating the title in my original charge was actually a great mercy to me, though I doubt Nigel knew it at the time. It spared me from what would otherwise have been considerable anguishing over the title of this volume. Let me begin this introduction by explaining why there is such anguish to be had in the semantics of placing a name upon the area of law which this book seeks to represent, and to which I have devoted the last nine years of my professional life.

There are three terms which vie for an author's favour when he discusses sources of international law related to weapons of mass destruction (WMD) that is, nuclear, chemical and biological weapons. These terms have in some significant ways separate, but in other ways significantly overlapping, meaning and descriptive usefulness. They are: 'arms control law'; 'nonproliferation law'; and 'disarmament law'. In my discussions with colleagues working in this area, I have found that there are significant variations of thought as to the respective definitions of these terms, and as to the propriety of their use in referring to selected sets of legal issues. I have come to the conclusion that there are, in fact, no orthodox or universally accepted understandings of the definitions of these terms and their relationship to each other. This fact is at once liberating to the analyst, in that he or she may therefore come to his/her own conclusion regarding their definition and use; and at the same time the cause of sometimes distracting disagreement with other writers in the same field.

When I am pressed for definitions of these terms, I respond as follows: arms control law, to my mind, encompasses within it all sources of international law whose object and purpose is to limit or completely stop the further development, acquisition and spread of weapons technologies both conventional and non-conventional, and/or whose object and purpose is to reverse trends of weapons proliferation and stockpiling by providing for a reduction in existing weapons arsenals. The term 'arms control law' was the preferred term in official circles for many decades, including the decades of the Cold War, for generally referring to all things weapons-law-related, in both the conventional and non-conventional contexts. Due to this traditional popularity, 'arms control law' has remained in the general perception the most appropriate term for the area of law this book seeks to cover.

'Disarmament law' is more of a niche term to my mind, meaning that it carries with it a significantly more restricted definition. 'Disarmament law' encompasses those sources of international law which relate specifically to what is sometimes termed vertical proliferation, or the possession and stockpiling of weapons within a state. To my mind this term does not include sources or provisions of law which seek to limit or prohibit horizontal proliferation, or the spread of weapons technologies from one state or non-state actor to other states or actors. Thus, when one speaks of disarmament law, one really speaks only of arms reduction and prohibition treaties or treaty provisions, where states agree to decrease or eliminate their

current stockpiles of specified weapons. Disarmament law as a term is almost always used exclusively in the context of non-conventional weapons (WMD).

‘Nonproliferation law’ is a term of more recent ascendance in popularity of use, and one which has come into vogue in official and academic circles really only in the last 10–15 years. My own view is that the first Gulf War in 1990–91 was the primary catalyst for the rising to prominence of this term, as this was the first instance of Western powers going to war with a state not a member of the group of five ‘sanctioned’ nuclear powers, to which somehow WMD technologies had proliferated, and which was threatening the use of those weapons against Western coalition soldiers. I think the term also suited US administrations in the post-Cold War decades, as their concern switched from primarily worrying about one large antipathetic state with thousands of nuclear weapons, to instead primarily worrying about many smaller antipathetic states and non-state actors who seemed to be seeking and sometimes acquiring nuclear weapons at an alarming rate (for example, Pakistan, North Korea, Libya, Iran). ‘Nonproliferation law’ as a term focused legal attention on the spread of WMD technologies, and especially nuclear weapons, outside of the chosen and sanctioned five. Which is precisely where the focus belonged in their opinion, and not, as US officials made clear, upon Western powers’ rather unimpressive track record in upholding their own vertical disarmament obligations. When one refers to nonproliferation law, one is clearly referring only to legal sources relevant to WMD proliferation, and not to conventional weapons regulation/disarmament. This is perhaps the chief distinction between nonproliferation law and arms control law as descriptive terms. Nonproliferation law is thus in essence a lesser included concept within the broader concept of arms control law.

As I understand the term nonproliferation law – and this is an understanding borne from examination of the fundamental nonproliferation legal instruments, including the 1968 Nuclear Nonproliferation Treaty (NPT), the 1972 Biological Weapons Convention (BWC) and the 1993 Chemical Weapons Convention (CWC) – refers to both horizontal proliferation and vertical proliferation. All of these cornerstone nonproliferation legal instruments address both vectors of proliferation of their subject weapons technologies within their terms. In fact in all three cornerstone treaties, there are provisions either prohibiting outright their subject weapons technologies (BWC, CWC) or requiring their eventual elimination through processes of good faith negotiation and implementing action (NPT). Thus, in my view, nonproliferation law as a term properly understood, subsumes within its descriptive scope the entirety of the descriptive scope of the term disarmament law, as well as the descriptive scope of the term arms control law, *with the significant exception* of arms control law’s definitional extension to additionally covering conventional weapons issues.

This is why in my writings I have generally favoured employing the term nonproliferation law, and have used it to refer to all legal sources relevant to both horizontal and vertical proliferation of WMD, inclusive of disarmament. So, this is a long-winded way of saying that, if I had chosen a title for this volume, I would have chosen the title ‘Nonproliferation Law’, because the volume seeks to provide a coherent and concise survey of some of the best scholarly writing on exactly this scope of legal sources. However, I realize that this term is less broadly recognized outside of the nonproliferation studies community, and so again I say that Nigel did me a great favour in naming the volume for me. I think that, notwithstanding what I feel are the definitional imperfections of the term ‘arms control law’ for expressing

this scope, the book will be better served by this title than it would have been by the title 'Nonproliferation Law' because it will be more easily understood by readers at first glance. Then, hopefully, in reading this introduction the reader will find the requisite refinement of the scope of this volume's treatment in order to understand and appreciate the materials that will be presented herein.

Subject of the Volume

With all of this being said about the title of this volume and the descriptive scope of the three competing terms that float around in this area, let me move on to discussing the discrete subject matter of this volume and the materials it contains.

My concept for this volume was to select some of the very best scholarship, by a range of scholars working both inside and outside of academia, to provide readers with an introduction to the full scope of writing about international law relevant to WMD proliferation. This was actually something of a challenge, because the best scholarship on international legal issues related to WMD proliferation is spread out over a wider range of publication outlets than is the case with most other substantive areas of international legal scholarship. Also, the best scholarship in this area is not written exclusively by academic lawyers. Rather, in addition to more traditional academics like myself, there are many leading international legal scholars in this area (for example, George Bunn, Jack Beard, Dieter Fleck, Mohamed Shaker) whose careers were spent largely in government service, and whose writings appear not only in traditional law journals but also in the journals of other academic disciplines, like *The Nonproliferation Review*, or in professional publications like *Arms Control Today*. Thus, to get a full picture of the best international legal scholarship which has been and which is being written on nonproliferation issues, I have tried to cast a wide net for both authors and publication sources.

In terms of the scope of issues covered in this volume, I have tried to present writing on the full range of normative sources regulating the technology areas of nuclear, chemical and biological weapons, as well as delivery vehicles (that is, missiles). Thus, in each technology area I have presented writing on the fundamental multilateral nonproliferation treaties underpinning each normative regime. These again include the NPT, the CWC and the BWC. I have additionally including writing on the monitoring and verification treaties and related organizations which seek to implement the provisions of these cornerstone nonproliferation treaties. These include the International Atomic Energy Agency (IAEA) safeguards agreements, and the Organization for the Prohibition of Chemical Weapons (OPCW). To complete the picture of the normative regimes regulating WMD proliferation, I have also included writing on the multilateral export control regimes whose purpose is to harmonize among supplier states those provisions of their domestic law related to controlling exports of WMD-related materials and technologies. These include the Nuclear Suppliers Group, the Australia Group and the Missile Technology Control Regime. It is vital to understand that all of these normative sources *taken together* comprise the international normative regime for regulating proliferation of WMD. They should be viewed together, and not in isolation, as

they are all interdependent normative sources that each play a particular and necessary role in the overall nonproliferation normative regime.

Nonproliferation as a Normative System

With this holistic view of the normative sources in mind, in the first part of the volume I have first presented two essays discussing the nonproliferation treaties and regimes system as a whole, from a systemic perspective. The first essay is by David Koplow, 'The Jurisprudence of Non-Proliferation: Taking International Law Seriously' (Chapter 1), in which he takes on the popular perception that there is in fact no international law to be found in an area of such national security sensitivity as WMD nonproliferation. He argues convincingly that law has played and continues to play an important role in this area of international relations. The second essay in this part is by David Fidler, 'International Law and Weapons of Mass Destruction: End of the Arms Control Approach?' (Chapter 2). Fidler's essay gives a very valuable overview of the legal sources comprising the nonproliferation treaties and regimes system, as well as a discussion of important political and legal trends which continue to shape the way the international community confronts the challenge of WMD proliferation.

Nuclear Weapons

With these system-perspective discussions as an introduction to the sources of law related to WMD nonproliferation, and to the integrated normative regime they comprise, the following parts proceed to a more discrete consideration of each WMD technology area in turn. The first technology area to be addressed is nuclear weapons. Nuclear weapons are the only uncontroversially designated weapons of mass destruction. The incomparable physical destructive power of nuclear fission and fusion weapons unquestionably demands such a separate classification from any other weapon conventionally used by the world's militaries. The effects of a high-yield nuclear weapon detonation, including the massive destructive force of the initial blast, thermal radiation and electromagnetic pulse, followed by the short-, medium- and long-term effects of residual nuclear radiation on an area extending up to hundreds of miles from the epicentre of the detonation, are simply unmatched in their effects upon physical structures and upon human, animal and plant life within the affected area.

The first essay in this part is a classic *Yale Law Journal* essay by Mason Willrich from 1968, 'The Treaty on Non-Proliferation of Nuclear Weapons: Nuclear Technology Confronts World Politics' (Chapter 3). Willrich was among the first to publish serious and sustained legal interpretive treatment of the Nuclear Nonproliferation Treaty. In this essay, we see some of the earliest thinking about the scope and meaning of the provisions of the NPT, and about the nuclear nonproliferation normative system which the newly established treaty had put into place. It is a long essay, but it is a classic and well worth the time spent in reading it. The second essay is something of a juxtaposition with Willrich's essay, as it represents some of the most current legal thinking about the NPT, both at present and for the future. John Simpson's

essay, 'The Future of the NPT' (Chapter 4), represents the culmination of his professional life's study of the NPT, and his educated thoughts about the future of the treaty system.

The rest of the essays in the nuclear weapons part are more targeted treatments of discrete aspects of the legal and institutional structure of the nuclear nonproliferation normative regime. George Bunn and Roland Timerbaev's essay, 'Nuclear Disarmament: How Much Have the Five Nuclear Powers Promised in the Non-Proliferation Treaty?' (Chapter 5), is an extremely important examination – written by two men who were directly involved in the negotiation of the NPT – of the legal scope and meaning of Article VI of the NPT, which covers nuclear disarmament. Laura Rockwood's essay, 'The IAEA Safeguards System' (Chapter 6), is a masterful treatment of the IAEA safeguards system – and Laura should know, as she heads the section of the IAEA's Office of Legal Affairs charged with safeguards. The next essay is one of my early publications on the Nuclear Suppliers Group (NSG), 'The Nuclear Suppliers Group: History and Functioning' (Chapter 7). I included it here not so much for its masterful analysis – this essay was not really an analytical essay as much as it was a product of a serious study I had just completed of the primary documents of the NSG. My hope in this essay was to give an accurate and detailed accounting of the NSG's history and functioning, as few if any published works had attempted to do so.

The next two essays in this part address the establishment of, often regional, nuclear weapon free zones, which is a topic of growing importance in nonproliferation law. Jozef Goldblat's 'Nuclear-Weapon-Free Zones: A History and Assessment' (Chapter 8) and Marco Roscini's 'Something Old, Something New: The 2006 Semipalatinsk Treaty on a Nuclear Weapon-Free Zone in Central Asia' (Chapter 9), together provide a review and assessment of existing nuclear weapon free zones.

These are followed by an excellent essay by Masahiko Asada, 'Arms Control Law in Crisis? A Study of the North Korean Nuclear Issue' (Chapter 10), in which he considers the legal questions surrounding North Korea's purported withdrawal from the NPT. The final essay in the nuclear weapons part, 'Why Less Is More: Law and Policy Considerations on the Iranian Nuclear Issue' (Chapter 11), is another of my essays, this time a very recent short essay in which I attempt to address both law and policy questions surrounding the Iranian nuclear crisis.

Chemical and Biological Weapons

In the third part I have chosen to present writing on both chemical and biological weapons. There are four reasons for this joined-up approach. The first is the profound historical and documentary links between the regulation through international law of biological weapons and chemical weapons. Both legal regimes are direct outgrowths of the same programme of work that began in the late 1960s, the CWC simply taking longer to achieve realization than the BWC due to Cold War politics and tensions. Their legal foundations as well are directly linked to the same legal progenitor – the 1925 Geneva Protocol. The second reason for a joined-up analysis of the BWC and the CWC regimes is that both areas of regulation enjoy a similar, peculiar normative and moral support for their prohibitive efforts. This support stems from a strong historical aversion in international society to the use of chemical and

biological weapons, which has translated into a strong communal norm that such use is, in a word, taboo. This peculiar yet pervasive taboo regarding chemical and biological weapons is the single most significant reason for the successes achieved in implementation of both the BWC and CWC. The third reason for joint analysis of the BWC and CWC regimes is the decreasingly clear line separating biological weapons and chemical weapons. The fields of chemistry and biology are converging, as evident in the recent rise to prominence of the field of molecular biology, and this convergence has blurred whatever clear distinctions were in the past perceived to exist between biological and chemical weaponizable materials. Fourth and finally, from an institutional/regime perspective, due to the coverage of the Australia Group control lists of both chemical and biological materials and dual-use technologies, there is parsimony to be found in addressing both regimes within the scope of one part.

Julian Robinson's essay, 'Chemical and Biological Weapons' (Chapter 12), leads off this part with an excellent overview examination of the area of chemical and biological weapons, with profound insights into how we should think about proliferation in this context. The second essay, 'The Organization for the Prohibition of Chemical Weapons: Moving Closer towards an International Arms Control Organization? A Quantum Leap in the Institutional Law of Arms Control' (Chapter 13), is a masterful and comprehensive overview by Eric Myjer of the key provisions of the CWC, as well as the role of the OPCW. With Jack Beard's essay, 'The Shortcomings of Indeterminacy in Arms Control Regimes: The Case of the Biological Weapons Convention' (Chapter 14), we move to a targeted consideration of the biological weapons legal regime, with a focus on the relative indeterminacy of the legal provisions of the regime – this a direct result of the unfortunate history of failed attempts to adopt an additional protocol to the BWC on monitoring and verification.

As with the nuclear weapons part, after addressing the fundamental legal sources and institutions, the part on chemical and biological weapons at this point proceeds with a consideration of other aspects of the legal and institutional structure of the CBW normative regime. In this part, Alexander Kelle's essay, 'CBW Export Controls: Towards Regime Integration?' (Chapter 15), provides a very insightful analysis of the distinction and overlap in roles as between the Australia Group and the OPCW in the area of chemical weapons export controls.

Missiles

The fourth part moves away from weapons technologies themselves to provide two readings on weapons delivery platforms, focusing on missiles. Notwithstanding the importance of missile technologies, and their close relationship with WMD technologies, there is currently no multilateral treaty regulating possession, development or trade in missile technologies. This area of technology has always bedevilled and resisted efforts of formal multilateral normative regulation due largely to the fact that missile technologies are by far the most dual-use in character among all WMD-related technologies. Missile components have many legitimate civilian uses quite apart from their military uses, many of which are themselves widely considered to be legitimate. These include, most importantly, use in peaceful space exploration and development. To add to the difficulty, there is virtually no means available to

distinguish between a civilian space missile programme and a military missile programme up until the very late stages of its development. Thus normative progression in this area has been effectively stalled over difficulties in addressing the specific technologies involved by means of formally binding instruments, due to the inability of such an instrument to distinguish effectively between legitimate materials and technologies and those which should be subject to regulation in this rapidly changing technological landscape.

However, the Missile Technology Control Regime (MTCR) was founded as a non-binding political arrangement in 1987 for the purpose of controlling the proliferation of rocket and unmanned air vehicle systems capable of delivering WMD, and their associated materials and technology. Its membership currently stands at 34 countries, which use the MTCR as a forum for co-ordination of export control measures specifically related to the two categories of missile-related items contained in the MTCR Annex. Its intended goal as a concept was to restrict exports of these sensitive items, and therefore inhibit their proliferation outside the boundaries of MTCR membership. The Hague Code of Conduct Against Ballistic Missile Proliferation was additionally agreed in 2002 as a non-binding arrangement among its original 93 (now 124) declarants, and as a supplement to the supply-side controls of the MTCR. Scott Jones reviews the MTCR and the Hague Code, and discusses the future of the missile nonproliferation normative regime in the first essay in this part, 'Emptying the Haunted Air: The Current and Future Missile Control Regime' (Chapter 16).

The second essay in this part by Rein Müllerson, 'The ABM Treaty: Changed Circumstances, Extraordinary Events, Supreme Interests and International Law' (Chapter 17), considers one of the few missile-related treaties that have come into being. Though not a multilateral treaty, but rather a bilateral treaty between the United States and the Soviet Union (and later Russia), the ABM Treaty played an important role in regulating anti-missile defence systems until the USA unilaterally withdrew from the Treaty in 2002.

The UN Security Council and Nonproliferation Law

The fifth part of this volume breaks from the consideration of the primary sources of WMD nonproliferation law, in order to consider closely related questions of the role, authority and track record of the UN Security Council in monitoring, implementing and enforcing compliance with these primary sources of nonproliferation law. The Security Council has increasingly played such a role since the end of the Cold War, beginning dramatically with the Council's actions surrounding the first Gulf War in 1990–91. In the past 20 years the Council has addressed WMD proliferation concerns in Iraq, Iran, North Korea, Libya, Pakistan and India.

The first essay in the part by Dieter Fleck, 'Developments of the Law of Arms Control as a Result of the Iraq-Kuwait Conflict' (Chapter 18), reviews the Council's actions surrounding the first Gulf War and continuing on the subject of Iraq through the decade of the 1990s. The second essay written by myself, 'Nuclear Non-Proliferation and the UN Security Council in a Multipolar World: Can International Law Protect States from the Security Council?' (Chapter 19), considers the history of Security Council action over the past 20 years more broadly, and

questions whether the Council's manifested understanding of its authority to act should be a cause for concern at a fundamental level for the international legal system.

Conclusion

I hope that through the readings selected for inclusion in this volume, readers will become more aware of the existing depth of scholarly writing on issues of WMD nonproliferation law. I hope further that this realization will contribute to a greater acceptance of the importance of legal analysis, and the legitimacy and influence of legal norms, in situations of international relations in which WMD proliferation issues are in play. As in other areas of international interaction, international law relating to WMD proliferation can, if sincerely respected and complied with by all sides, contribute to transparency and information sharing between states, predictability of behaviour and trust among nations rooted in mutual rational expectations of reciprocity. International law is no panacea for the troubles states face in their relations with other states. But it is a tool which, if used by all sides in good faith, can help states to accept and live with their differences and co-exist peacefully.

Selected Bibliography

- Den Dekker, Guido (2001), *The Law of Arms Control: International Supervision and Enforcement*, Leiden: Martinus Nijhoff.
- Goldblat, Jozef (ed.) (2000), *Nuclear Disarmament: Obstacles to Banishing the Bomb*, London: I.B. Tauris Publishing.
- Goldblat, Jozef (2002), *Arms Control: The New Guide to Negotiations and Agreements*, London, Thousand Oaks, CA and New Delhi: Sage Publishing.
- Joyner, Daniel H. (2009), *International Law and the Proliferation of Weapons of Mass Destruction*, New York: Oxford University Press.
- Joyner, Daniel H. (2011), *Interpreting the Nuclear Nonproliferation Treaty*, New York: Oxford University Press.
- Krutzsch, Walter and Trapp, Ralf (1994), *A Commentary on the Chemical Weapons Convention*, Leiden: Martinus Nijhoff.
- Myjer, E.P.J. (ed.) (2001), *Issues of Arms Control and the Chemical Weapons Convention: Obligations Inter Se and Supervisory Mechanisms*, Leiden: Brill.
- Sands, Philippe and Boisson de Chazournes, Laurence (eds) (1999), *International Law, the International Court of Justice and Nuclear Weapons*, Cambridge: Cambridge University Press.
- Shaker, Mohamed (1980), *The Nuclear Nonproliferation Treaty: Origin and Implementation 1959–1979*, New York: Oceana Publishing.
- Willrich, Mason (1969), *Nonproliferation Treaty: Framework for Nuclear Arms Control*, Charlottesville, VA: Michie Publishing.