References

[1] K. J. Åström and L. Rundqwist. Integrator windup and how to avoid it. In *American Control Conference*, pages 1693–1698, Pittsburgh, PA, 1989.

[2] C. Barbu, R. Reginatto, A. R. Teel, and L. Zaccarian. Anti-windup for exponentially unstable linear systems with inputs limited in magnitude and rate. In *American Control Conference*, Chicago, IL, June 2000.

[3] A. Bempored, A.R. Teel, and L. Zaccarian. Anti-windup synthesis via sampled-data piecewise affine op timal control. *Automatica*, 40(4):549–562, 2004.

[4] D.S. Bernstein and A.N. Michel. A chronological bibliography on saturating actuators. *Int. J. Robust and Nonlinear Control*, 5(5):375–380, 1995.

[5] J-M. Biannic, C. Roos, and S. Tarbouriech. A practical method for fixed-order anti-windup design. In 7th *IFAC Symposium on Nonlinear Control Systems (N OLCOS)*, Pretoria, South Africa, 2007.

[6] J-M. Biannic and S. Tarbouriech. Optimization and implementation of dynamic anti-windup compensators in aircraft control systems with multiple satur ations. *Control Engineering Practice*, in preparation.

[7] J-M. Biannic, S. Tarbouriech, and D. Farret. A practical approach to performance analysis of saturated systems with application to fighter aircraft flight controllers. In 5th *IFAC Symposium ROCOND*, Toulouse, France, July 2006.

[8] O. Brieger, M. Kerr, D. Leissling, I. Postlethwaite, J. Sofrony, and M.C. Turner. Anti-windup compensation of rate saturation in an experimental air craft. In *Proc. American Control Conference*, New York, 2007.

[9] C. Burgat and S. Tarbouriech. Intelligent anti-windup for systems with input magnitude satur ation. *Int. J. Robust and Nonlinear Control*, 8:1085–1100, 1998.

[10] P. J. Campo, M. Morari, and C. N. Nett. Multivariable anti-windup and bumpless transfer: a general theory. In *American Control Conference*, pages 1706–1711, Pittsburgh, 1989.

[11] Y.Y. Cao, Z. Lin, and B.M. Chen. An output feedback $\mathcal{H}_\infty$ controller for linear systems subject to sensor nonlinearities. *IEEE Transactions on Circuits and Systems-I*, 50(7):914–921, 2003.

[12] Y.Y. Cao, Z. Lin, and D.G. Ward. An antiwindup approach to enlarging domain of attraction for linea r systems subject to actuator saturation. *IEEE Trans. Aut. Cont.*, 47(1):140–145, 2002.

[13] J. Chiasson and J-J. Loiseau (Eds.). *Applications of time-delay systems*. LNCIS, vol.352, Springer Verlag, 2007.

[14] S. Crawshaw. Global and local analyses of coprime-factor based anti-windup for stable and unstable plants. In *Proc. European Control Conference*, Cambridge, 2003.

[15] H. Duda. Prediction of pilot-int-the-loop osciallations due to rate saturation. *Journal of Guidance, Control and Dynamics*, 20(3):581–587, 1997.

[16] C. Edwards and I. Postlethwaite. Anti-windup and bumpless-transfer schemes. *Automatica*, 34(2):199–210, 1998.

[17] H. A. Fertik and C. W. Ross. Direct digital control algorithm with anti-windup feature. *ISA Transactions*, 6:317–328, 1967.

[18] P. Gahinet and P. Apkarian. A linear matrix inequality approach to $\mathcal{H}_\infty$ control. *Int. J. Robust and Nonlinear Control*, 4:421–448, 1994.

[19] S. Galeani, M. Massimetti, A. R. Teel, and L. Zaccarian. Reduced order linear anti-windup augmentation for stable linea r systems. *International Journal of Systems Science*, 37:115–127, 2006.

[20] S. Galeani, S. Onori, A.R. Teel, and L. Zaccarian. Further results on static linear anti-windup design for control systems subject to magnitude and rate saturation. In *IEEE Conference on Decision and Control*, San Diego, CA, USA, December 2006.

[21] S. Galeani, S. Onori, A.R. Teel, and L. Zaccarian. A magnitude and rate saturation model and its use in the solutio n of a static anti-windup problem. , 57(1):19, 2008. *Systems and Control Letters*, 57(1):1–9, 2008.

[22] G. Garcia, J.M. Gomes da Silva Jr., and S. Tarbouriech. Dynamic output controller design for linear systems with actuato r and sensor saturation. In *American Control Conference*, New York, USA, July 2007.

[23] A.H. Glattfelder and W. Schaufelberger. *Control systems with input and output constraints*. Springer-Verlag, London, 2003.

[24] J. M. Gomes da Silva Jr. and S. Tarbouriech. Local stabilization of discrete-time systems with saturating control: an LMI-based approach. *IEEE Transactions on Automatic Control*, pages 119–121, 2001.

[25] J.M. Gomes da Silva Jr. and S. Tarbouriech. Anti-windup design with guaranteed regions of stability: an lmi-based approach. In *Proceedings of the 42th IEEE Conference on Decision and Control*, Hawaii, USA, 2003.

[26] J.M. Gomes da Silva Jr. and S. Tarbouriech. Anti-windup design with guaranteed region of stability: an lmi-based approach. *IEEE Trans. Aut. Cont.*, 50(1):106–111, 2005.

[27] J.M. Gomes da Silva Jr. and S. Tarbouriech. Anti-windup design with guaranteed regions of stability for d iscrete-time linear systems. *Systems and Control Letters*, 55(3):184–192, 2006.

[28] J.M. Gomes da Silva Jr., S. Tarbouriech, and R. Reginatto. Analysis of regions of stability for linear systems with saturating inputs trhough an anti-windup scheme. In *IEEE-Conference on Control Applications 2002*, Glasgow, UK, 2002.

[29] G. Grimm, J. Hatfield, I. Postlethwaite, A.R. Teel, M.C. Turner, and L. Zaccarian. Anti-windup for stable linear systems with input saturation: an LMI based synthesis. *IEEE Transactions on Automatic Control*, 48(9):1509–1525, 2003.

[30] G. Grimm, I. Postlethwaite, A.R. Teel, M.C. Turner, and L. Zaccarian. Linear matrix inequalities for full and reduced order anti-wi ndup synthesis. In *Proceedings of the American control conference*, pages 4134 – 4139, Arlington, VA, 2001.

[31] G. Grimm, A.R. Teel, and L. Zaccarian. The L_2 anti-windup problem for discrete-time linear sy stems: definition and solutions. In *Proceedings of the American control conference*, pages 5329 – 5334, Denver, CO, 2003.

[32] G. Grimm, A.R. Teel, and L. Zaccarian. Robust linear anti-windup synthesis for recovery of unconstraine d performance. *International Journal of Robust and Nonlinear Control*, 14(13-14):1133–1168, 2004.

[33] K. Gu, V.L. Kharitonov, and J. Chen. *Stability of time-delay systems*. Birkh$\acute{}$auser, Boston, 2003.

[34] R. Hanus and M. Kinnaert. Control of constrained multivariable systems using conditioning technique. In *American Control Conference*, pages 1712–1718, Pittsburgh, 1989.

[35] R. Hanus, M. Kinnaert, and J. L. Henrotte. Conditioning technique, a general anti-windup and bumpless transfer method. *Automatica*, 23:729–739, 1987.

[36] D. Henrion and S. Tarbouriech. Lmi relaxations for robust stability of linear systems with saturating controls. *Automatica*, 35:1599–1604, 1999.

[37] G. Herrmann, M.C. Turner, P.P. Menon, D.G. Bates, and I. Postlethwaite. Anti-windup synthesis for nonlinear dynamic inversion controllers. In *Proc. IFAC Robust Controller Design Symposium (ROCOND)*, Toulouse, 2006.

[38] G. Herrmann, M.C. Turner, and I. Postlethwaite. Pratical implementation of a novel anti-windup scheme in a hdd-d ual-stage servo-system. *IEEE/ASME Transactions on Mechatronics*, 9(3):580–592, 2004.

[39] G. Herrmann, M.C. Turner, and I. Postlethwaite. Some new results on anti-windup conditioning using the West on-Postlethwaite approach. *Proc. Conference on Decision and Control*, 2004.

[40] G. Herrmann, M.C. Turner, and I. Postlethwaite. Discrete-time and sampled-data anti-windup synthesis: stabili ty and performance. *International Journal of Systems Science*, 2006.

[41] G. Herrmann, M.C. Turner, and I. Postlethwaite. Performance oriented anti-windup for a class of neural network c ontrolled systems. *IEEE Transactions on Neural Networks*, 18(2):449–465, 2007.

[42] H. Hindi and S. Boyd. Analysis of linear systems with saturation using convex optim ization. In *Proc. of 37th Conference on Decision and Control (CDC'98)*, pages 903–908, Tampa, USA, 1998.

[43] P. Hippe. *Windup in control. Its effects and their prevention.* AIC, Springer, Germany, 2006.

[44] I. Horrowitz. A synthesis theory for a class of saturating systems. *International Journal of Control*, 38(1):169–187, 1983.

[45] J. Howitt. Application of non-linear dynamic inversion to rotorcraft fligh t control. *Proceedings of the American Helcopter Society Conference*, 2005.

[46] Q. Hu and G.P. Rangaiah. Anti-windup schemes for uncertain nonlinear systems. *IEE Proceedings - Control Theory and Applications*, 147(3):321–329, 2000.

[47] T. Hu and Z. Lin. *Control systems with actuator saturation: analysis and design.* Birkhäuser, Boston, 2001.

[48] T. Hu, A.R. Teel, and L. Zaccarian. Regional anti-windup compensation for linear systems with inp ut saturation. In *Proceedings of the American control conference*, pages 3397 – 3402, Portland, OR, 2005.

[49] T. Hu, A.R. Teel, and L. Zaccarian. Anti-windup synthesis for linear control systems with input saturation: achieving regional, nonlinear performance. *Automatica*, to appear.

[50] J.M. Gomes da Silva Jr., S. Tarbouriech, and G. Garci a. Anti-windup design for time-delay systems subject to input saturation: An LMI-based approach. *European Journal of Control*, 6:1–13, 2006.

[51] J.M. Gomes da Silva Jr., S. Tarbouriech, and G. Garcia. Local stabilization of linear systems under amplitude and rate saturating actuators. *IEEE Trans. Aut. Cont.*, 48(5):842–847, 2003.

[52] M. Johansson and A. Rantzer. Computation of piecewise quadratic lyapunov functions for hyb rid systems. *IEEE Trans. Aut. Cont.*, 43(4):555–559, 1998.

[53] E.N. Johnson and A.J. Calise. Limited authority flight control for reusable launch vehicles. *AIAA Journal of Guidance, Control and Dynamics*, 26(6):906–913, 2003.

[54] N.E. Kahveci, P.A. Ioanou, and M.D. Mirmirani. A robust adaptive control design for gliders subject to actuator s aturation nonlinearities. In *Proc. American Control Conference*, New York, 2007.

[55] G. Kaliora and A. Astolfi. Nonlinear control of feedforward systems with bounded signals. *IEEE Transactions on Automatic Control*, 49(11):1975–1990, 2004.

[56] V. Kapila and K. Grigoriadis. *Actuator saturation control.* Marcel Dekker, Inc., 2002.

[57] N. Kapoor and P. Daoutidis. An observer based anti-windup scheme for nonlinear systems with input constraints. *International Journal of Control*, 72(1):18–29, 1999.

[58] N. Kapoor, A. R. Teel, and P. Daoutidis. An anti-windup design for linear systems with input saturation. *Automatica*, 34(5):559–574, 1998.

[59] M. Kerr, E. Villota, and S. Jayasuriya. Robust anti-windup design for input constrained SISO systems. *Proc. 8th Int. Symposium on QFT and Robust Frequency Domain Met hods.*, 2007.

[60] H. K. Khalil. *Nonlinear Systems*. MacMillan, 1992.

[61] R.B. Koplon, M.L.J. Hautus, and E.D. Sontag. Observability of linear systems with saturated outputs. *Linear Algebra and Applications*, 205-206:909–936, 1994.

[62] M. V. Kothare, P. J. Campo, M. Morari, and C. N. Nett. A unified framework for the study of anti-windup designs. *Automatica*, 30(12):1869–1883, 1994.

[63] M. V. Kothare and M. Morari. Stability analysis of anti-windup control scheme: a review and some generalizations. In *European Control Conference*, Brussels, Belgium, 1997.

[64] M. V. Kothare and M. Morari. Multiplier theory for stability analisys of anti-windup control systems. *Automatica*, 35:917–928, 1999.

[65] G. Kreisselmeier. Stabilisation of linear systems in the presence of output measurem ent saturation. *Systems and Control Letters*, 29:27–30, 1996.

[66] N. J. Krikelis. State feedback integral control with inteligent integrator. *Int. J. Control*, 32:465–473, 1980.

[67] Z. Lin. Semi-global stabilisation of linear systems with position and rate -limited actuators. *Systems and Control letters*, 30:1–11, 1997.

[68] Z. Lin and T. Hu. Semi-global stabilisation of linear systems subject to output satu ration. *Systems and Control Letters*, 43:211–217, 2001.

[69] Z. Lin, R. Mantri, and A. Saberi. Semi-global output regulation for linear systems subject to input saturation - a low and high gain design. *Control Theory and Advanced Technology*, 10(4):2209–2232, 1995.

[70] J. C. Lozier. A steady-state approach to the theory of saturable servo syste ms. *IRE Transactions on Automatic Control*, pages 19–39, May 1956.

[71] B. Lu, F. Wu, and S. Kim. Linear parameter varying anti-windup compensation for enhanced flight control performance. *AIAA Journal of Guidance, Control and Dynamic*, 28(3):494–504, 2005.

[72] B.J. Lurie. The absolutely stable nyquist stable nonlinear feedback system d esign. *International Journal of Control*, 40(6):1119–1130, 1984.

[73] V.R. Marcopoli and S.M. Phillips. Analysis and synthesis tools for a class of actuator-limited multi variable control systems: a linear matrix inequality approach. *International Journal of Robust and Nonlinear Control*, 6(9-10):1045–1063, 1996.

[74] R. Miller and M. Pachter. Manual flight control with saturating actuators. *IEEE Control Systems*, 18(1):10–19, 1998.

[75] S. Miyamoto and G. Vinnicombe. Robust control of plants with saturation nonlinearity based on coprime factor representation. In *Conference on Decision and Control*, pages 2838–2840, Kobe, Japan, December 1996.

[76] E.F. Mulder, M. V. Kothare, and M. Morari. Multivariable anti-windup controller synthesis using linear matrix inequalities. *Automatica*, 2001.

[77] E.F. Mulder and M.V. Kothare. Synthesis of stabilising anti-windup controllers using piecewi se quadratic Lyapunov functions. *Proc. American Control Conference*, pages 3239–3243, 2000.

[78] E.F. Mulder, M.V. Kothare, and M. Morari. Multivariable anti-windup controller synthesis using linear matrix inequalities. *Automatica*, 37:1407–1416, 2001.

[79] T. Nguyen and F. Jabbari. Output feedback controllers for disturbance attenuation with a ctuator amplitude and rate saturation. *Automatica*, 36(9):1339–1346, 2000.

[80] S-I. Niculescu. *Delay Effects on Stability. A Robust Control Approach*. Springer-Verlag, Berlin, Germany, 2001.

[81] J-K. Park, C-H. Choi, and H. Choo. Dynamic anti-windup method for a class of time-delay control systems with input saturation. *Int. J. Robust and Nonlinear Control*, 10:457–488, 2000.

[82] J-K. Park and H.Y. Youn. Dynamic anti-windup based control method for state constra ined systems. *Automatica*, pages 1915–1922, 2003.

[83] K.-J. Park, H. Lim, T. Basar, and C.-H.Choi. Anti-windup compensator for active queue management in tcp ne tworks. *Control Engineering Practice*, 11(10):1127–1142, 2003.

[84] I. Queinnec, S. Tarbouriech, and G. Garcia. Anti-windup design for aircraft control. In *Proceedings of the IEEE Conference on Control Applications (CCA)*, Munich, Germany, 2006.

[85] J.P. Richard. Time-delay systems: an overview of some recent advances and open problems. *Automatica*, 39:1667–1604, 2003.

[86] B.G. Romanchuk. Some comments on anti-windup synthesis using LMI's. *International Journal of Robust and Nonlinear Control*, 9(10):717–734, 1999.

[87] C. Roos, J-M. Biannic, S. Tarbouriech, and C. Prieur. *On-ground aircraft control design using an LPV anti-windup approach*. Chap. 7, LNCIS, Springer Verlag., to appear.

[88] L. Rundquist and K. Stahl-Gunnarsson. Phase compensation of rate-limiters in unstable aircraft. *Proc. IEEE Conference on Control Applications*, 1996.

[89] A. Saberi, Z. Lin, and A.R. Teel. Control of linear systems with saturating actuators. *IEEE Trans. on Automatic Control*, 41(3):368–378, 1996.

[90] A. Saberi and A. Stoorvogel. Output regulation of linear plants with actuators subject to amplitude and rate constraints. *Int. J. Robust and Nonlinear Control*, 9(10):631–657, 1999.

[91] M. Saeki and N. Wada. Synthesis of a static anti-windup compensator via linear matrix inequalities. *Int. J. Robust and Nonlinear Control*, 12:927–953, 2002.

[92] E. Schuster, M.L. Walker, D.A. Humphreys, and M. Krsti 'c. Plasma vertical stabilization with actuation constraints in t he diii-d tokamak. *Automatica*, 41(7):1173–1179, 2005.

[93] J.S. Shamma. Anti-windup via constrained regulation with observers. *Systems and Control Letters*, 40(4):261–268, 2000.

[94] I. Postlethwaite S.L. Gatley, M.C. Turner and A. Kumar. A comparison of rate-limit compensation schemes for pilot-ind uced-oscillation avoidance. *Aerospace Science and Technology*, 10(1):37–47, 2006.

[95] J. Sofrony, M.C. Turner, and I. Postlethwaite. Anti-windup synthesis for systems with rate-limits: a Riccat i equation approach. *Proc. SICE Annual Conference*, 2005.

[96] G. Stein. Bode lecture: respect the unstable. In *Conference on Decision and Control*, Tampa, USA, 1989.

[97] A.A. Stoorvogel and A. Saberi (Editors). Special issue: Control problems with constraints. *International Journal of Robust and Nonlinear Control*, 9(10), 1999.

[98] R. Suarez, J. Alvarez-Ramirez, and J. Solis-Daun. Linear systems with bounded inputs: global stabilisation with eigenvalue placement. *International Journal of Robust and Nonlinear Control*, 7:835–845, 1997.

[99] S. Tarbouriech and G. Garcia. Preliminary results about anti-windup strategy for systems subject to actuator and sensor saturations. In *Proc. of the IFAC World Congress*, Prague, 2005.

[100] S. Tarbouriech, G. Garcia, and A.H. Glattfelder (Eds.). *Advanced strategies in control systems with input and output constraints*. LNCIS, vol.346, Springer Verlag., 2007.

[101] S. Tarbouriech and J.M. Gomes da Silva Jr. Admissible polyhedra for discrete-time linear systems with sa turating controls. In *American Control Conference*, volume 6, pages 3915–3919, Albuquerque, USA, 1997.

[102] S. Tarbouriech, J.M. Gomes da Silva Jr., and F.A. Bender. Dynamic anti-windup synthesis for discrete-time linear system s subject to input saturation and L_2 disturbances. In *Proceedings of the 5th IFAC Symposium on Robust Control D esign (ROCOND'2006)*, Toulouse, France, 2006.

[103] S. Tarbouriech, J.M. Gomes da Silva Jr., and G. Garcia. Delay-dependent anti-windup loops for enlarging the stability region of time-delay systems with saturating inputs. *ASME - Journal of Dynamic Systems, Measurement and Control*, 125(1):265–267, june 2003.

[104] S. Tarbouriech, J.M. Gomes da Silva Jr., and G. Garcia. Delay-dependent anti-windup strategy for linear systems with saturating inputs and delayed outputs. *International Journal of Robust and Nonlinear Control*, 14:665–682, 2004.

[105] S. Tarbouriech, C. Prieur, and J.M. Gomes da Silva Jr. An anti-windup strategy for a flexible cantilever beam. In *Proceedings of the 16th IFAC World Congress*, Prague, CZ, 2005.

[106] S. Tarbouriech, C. Prieur, and J.M. Gomes da Silva Jr. Stability analysis and stabilization of systems presenting nest ed saturations. *IEEE Trans. Aut. Cont.*, 51(8):1364–1371, 2006.

[107] S. Tarbouriech, I. Queinnec, and G. Garcia. Stability region enlargement through anti-windup strategy for linear systems with dynamics restricted actuator. *International Journal of System Science*, 37(2):79–90, 2006.

[108] A. R. Teel. Anti-windup for exponentially unstable linear systems. *Int. J. Robust and Nonlinear Control*, 9(10):701–716, 1999.

[109] A. R. Teel and J. B. Buffington. Anti-windup for an F-16's daisy chain control allocator. In *AIAA GNC Conference*, 1997.

[110] A. R. Teel and N. Kapoor. The $\mathcal{L}_2$ anti-windup problem: Its definition and solution. In *European Control Conference*, Brussels, Belgium, July 1997.

[111] A. R. Teel and N. Kapoor. Uniting local and global controllers. In *European Control Conference*, Brussels, Belgium, July 1997.

[112] A. R. Teel, L. Zaccarian, and J.J. Marcinkowski. An anti-windup strategy for active vibration isolation system s. *Control Engineering Practice*, 14(1):17–27, 2006.

[113] A.R. Teel and J. Buffington. Anti-windup for an f-16's daisy chain control allocator. In *Proc. of AIAA GNC Conference*, pages 748–754, New Orleans, LA, USA, 1997.

[114] M.C. Turner and L. Zaccarian (Editors). Special issue: Anti-windup. *International Journal of System Science*, 37(2):65–139, 2006.

[115] M.C. Turner, G. Herrmann, and I. Postlethwaite. Accounting for uncertainty in anti-windup synthesis. *Proc. American Control Conference*, 2004.

[116] M.C. Turner, G. Herrmann, and I. Postlethwaite. Incorporating robustness requirements into anti-windup design. *IEEE Transactions on Automatic Control*, 52(10), 2007.

[117] M.C. Turner and I. Postlethwaite. A new perspective on static and low order anti-windup synthesis. *International Journal of Control*, 77(1):27–44, 2004.

[118] M.C. Turner and S. Tarbouriech. Anti-windup for linear systems with sensor saturation: Suffic ient conditions for global stability and l2 gain. In *Proceedings of the IEEE Conference on Decision and Control (CDC)*, San Diego, USA, 2006.

[119] F. Tyan and D.S. Bernstein. Anti-windup compensator synthesis for systems with saturating actuators. *Int. J. Robust and Nonlinear Control*, 5(5):521–537, 1995.

[120] E. Villota, M. Kerr, and S. Jayasuriya. A study of configurations for anti-windup control of uncertain s ystems. *IEEE Conference on Decision and Control*, 2006.

[121] N. Wada and M. Saeki. Synthesis of a static anti-windup compensator for systems with magnitude and rate limited actuators. In *IFAC Symp. Rob. Cont. Desing - ROCOND*, Prague, Czech Rep., June 2000.

[122] K. S. Walgama, S. Ronnback, and J. Sternby. Generalization of conditioning technique for anti-windup compensators. *IEE Proc. D*, 139(2):109–118, 1992.

[123] M.J. Walsh and M.J. Hayes. A robust throughput rate control mechanism for an 802.15.4 wirele ss sensor network - an anti-windup approach. In *Proc. of the American Control Conference*, New York, 2007.

[124] P.F. Weston and I Postlethwaite. Analysis and design of linear conditioning schemes for systems c ontaining saturating actuators. *IFAC Nonlinear Control System Design Symposium*, 1998.

[125] P.F. Weston and I Postlethwaite. Linear conditioning for systems containing saturating actuators. *Automatica*, 36(9):1347–1354, 2000.

[126] F. Wu and B. Lu. Anti-windup control design for exponentially unstable lti syste ms with actuator saturation. *Systems and Control Letters*, 52:305–322, 2004.

[127] F. Wu and M. Soto. Extended anti-windup control schemes for lti and lft systems with actuator saturations. *Int. J. Robust and Nonlinear Control*, 14:1255–1281, 2004.

[128] W. Wu and S. Jayasuriya. A new QFT design methodology for feedback systems under input saturation. *J. Dyn. Sys., Meas. and Cont.*, 123:225–23, 2001.

[129] C. Wurmthaler and P. Hippe. Closed-loop design for stable and unstable plants with input saturation. In *European Control Conference*, pages 1084–1088, Gröningen, The Netherlands, 1993.

[130] L. Zaccarian, Y. Li, E. Weyer, M. Cantoni, and A.R. Teel. Anti-windup for marginally stable plants and its application to open water channel control systems. *Control Engineering Practice*, 15(2):261–272, 2007.

[131] L. Zaccarian, D. Nesic, and A.R. Teel. $\mathcal{L}_2$ anti-windup for linear dead-time systems. *Systems and Control Letters*, 54(12):1205–1217, 2005.

[132] L. Zaccarian and A.R. Teel. A common framework for anti-windup, bumpless transfer and reliable designs. *Automatica*, 38(10):1735–1744, 2002.

[133] L. Zaccarian and A.R. Teel. Nonlinear scheduled anti-windup design for linear system. *IEEE Transactions on Automatic Control*, 49(11):2055–2061, 2004.